

BUSINESS WEEK

SEPT. 7, 1946

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DETROIT



Curtis E. Calder of Electric Bond & Share: Power at home and abroad (page 8)

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WEEK
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WASHINGTON BULLETIN

SWORDS OR PLOUGHSHARES

A basic problem is on its way to the top Washington policy-makers. Soon they are going to have to umpire a head-on clash between the needs of the civilian economy and the requirements of a slowly intensifying arms race.

President Truman must decide whether to permit production of autos, refrigerators, and the whole gamut of consumer hard goods to be slowed if necessary to put the country on a semi-mobilized basis toward which international tensions are ever more urgently pushing it.

It's not a decision that will be made in public. Few things could be more politically unpalatable at this time, but Truman will have to take a stand soon.

Who Gets the Materials?

Spearheading the problem is the question of stockpiles of strategic materials. The military has \$100,000,000 this year to build up its reserves. This isn't too frightening a sum, but if it cuts into the tight nonferrous metal markets, for instance, it can cause real trouble.

The military would like to make an across-the-board start at accumulating at least minimum stocks of all the critical items—and the trouble is that the things it wants most to have in reserve are the very things for which industry is scrambling.

CPA and housing officials will have a say in the decision, and the problem is headed straight for the White House.

An Enduring Political Issue

No decision made now will be final. The whole issue is bound to become a political football over the next few years. Already, for example, western congressmen are calling for subsidized working of high-cost mines as part of the stockpiling operation. Rep. John Murdock of Arizona is stirring up an investigation for this fall along these lines by the House postwar planning committee.

And any time that business activity shows signs of slacking, the mobilization program would provide a made-to-order and politically unassailable military WPA.

IS ANNUAL WAGE THE OUT?

This week the guaranteed annual wage (BW—Aug. 31'46, p19) was seized upon as the way out of the wage-inflation dilemma.

The Administration decided to throw its weight behind the idea as a means of allaying labor unrest without incur-

ring the inflationary effect of more large wage increases. The OWMR Advisory Board got a White House blessing for Murray Latimer's so far rather slow-moving study of the mechanics of regularized employment.

Union leadership, acutely aware that public opinion is backing White House resistance to a second round of big wage boosts, is grasping at the annual wage as a means of pacifying members without clashing head-on with the Administration.

Union Leaders See Handwriting

Labor expectation of a slackening in business is giving added appeal to guaranteed wage demands. Union leaders figure that it's now or never. With high employment continuing through next spring's bargaining period, steps toward a guaranteed wage may appear to some industries as a cheap concession for them to make.

With the principle once established, many union leaders are convinced that they can hang on to this gain, more easily than to big wage increases, through the bad times that some of them already see coming up as early as 1948.

Even in industry the attitude toward the Latimer study is getting a little warmer. Latimer has been having trouble finding industries willing to cooperate. This week it looked as if one or more of the big auto companies—long an outstanding example of irregular employment—would go along.

UTILITY RATE SHAVER

Renewed government pressure for reducing interstate gas and electric utility rate bases is seen in a quiet move by the Federal Power Commission to shift utility depreciation reserves from the liabilities to the assets column and treat them as a deduction from plant account.

The FPC has taken the proposal to the Budget Bureau, whose approval is prerequisite to any change in federal reporting requirements. If FPC is successful, the utilities' only recourse is to appeal from the order under the provisions of the untried Administrative Procedures Act.

WITH OR WITHOUT INCHES

Chances that War Assets Administration will sell the Big Inch and Little Big Inch Oil pipelines for conversion to natural gas remain slim (BW—Aug.

10'46, p19), but that's not likely to keep natural gas out of the New York-New Jersey-Philadelphia area much longer.

Various interests have their eyes on that huge market, and next week the Trans-Continental Gas Pipe Line Co., Inc., Longview, Tex., one of the bidders to convert the Inch lines to gas, will ask the Federal Power Commission to authorize construction of a new 1,250-mi. gas pipeline extending from the company's large gas reserves in east Texas. Construction of the new line, for which right-of-way is now being sought, is contingent, of course, upon the company's failure to obtain the Inch lines. Trans-Continental figures it can build the new line for \$115,000,000, about \$17,000,000 less than its bid to buy and convert the Inch lines.

Most of the 320,000,000-cu. ft. daily capacity of the projected line is already sold to Philadelphia Gas Works, Philadelphia Electric Co., Public Service Corp. of New Jersey, Consolidated Edison of New York, and Brooklyn Union Gas Co.

With its gas supply and market all lined up, Trans-Continental hopes it can swing to the new project the financial backing that it got for purchase of the Inch lines.

BUT NOT "SECOND ROUND"

The second postwar wage increase to cotton textile workers is not a "second round" increase. It's the last instalment in the first. That is the reasoning of the National Wage Stabilization Board in approving for price relief purposes 5¢ of an 8¢ increase recently granted by two groups of New England and southern mill operators.

Raises of 8¢ in the North and 10¢ in the South had been given the workers last fall, but the wage board now says that happened too early to mirror accurately reconversion influences. This rationale invites unions in other industries which got only a nibble shortly after V-J Day to take another bite.

NWSB's Line of Reasoning

In forcing the operators to absorb 3¢ of the increase, NWSB took the ground that the industry was in a favorable price position else it would not have put the raise into effect in advance of approval. In approving only 5¢, an action which NWSB labor members didn't like because it may influence textile agreements yet to be negotiated, the board's majority was mindful that weekly take-home pay in the industry has risen 105% since January, 1941—



Gasoline takes doctors on their healing rounds...brings visiting nurses to the bedsides of the sick...transports patients, medicines and equipment to hospitals...enables traveling clinics to serve remote hamlets with the finest of medical care.

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of gasoline through*

ETHYL



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WASHINGTON BULLETIN (Continued)

6% since V-J Day, whereas the weekly take-home in all manufacturing has decreased 8% since April, 1945 (BW—Aug. 24 '46, p98).

Union organization drives in the South aren't helped by the fact that employees of the southern companies involved in this decision are nonunion.

FACT-FINDERS' FUTURE

Whether they like it or not, employers and unions who can't bargain out their differences in the next round of wage disputes are likely to run into more government fact-finding boards. The Labor Dept.'s experience with ten such panels in the last year has sold Secretary Schwollenbach on their usefulness,

and he plans to ask Congress to put up money for more of them.

If it doesn't have any labor control legislation in mind, Congress may fall in with Schwollenbach's approach. The plan could also be used in an attempt to forestall such legislation. It wouldn't raise the objections that labor made to compulsory fact-finding with a 30-day cooling-off period, for which Truman asked Congress last December (BW—Dec. 8 '45, p17), or to the "emergency commissions" and cooling-off time which would have been provided for in utility disputes under the vetoed Case bill.

It's still a question whether Schwollenbach will get White House support for greater resort to fact-finding. Other advisers to the President feel that the

technique can lose its effectiveness through over-use, particularly in run-of-mill disputes, and that the disputants' prejudices often figure more importantly than the facts in arriving at settlements.

CAPITAL GAINS (AND LOSSES)

War Assets Administration has acceded to Housing Coordinator Wyatt's request to hold off for 90 days on disposition of some 50 surplus aircraft plants (BW—Aug. 31 '46, p5) in case airplane builders want them in connection with plans to build prefabricated metal houses.

Servicemen discovered to be in need of glasses were usually nearsighted,

New Congress May Scuttle Reorganization Plan

With a fat pay boost and other benefits in their pockets—the reward for overhauling Capitol Hill's sluggish and slovenly law-making machinery—members of the next Congress are very likely to renege on important features of the legislative reorganization act.

• **Grumbling to Increase**—With elections in the offing, grumbling about the curtailed committee setup and changes in legislative procedure still is pretty quiet, but will grow loud and long by the time Congress assembles in January, with most of the incumbents back in their seats.

Thus far, most of the complaints are coming from Democratic members who would be removed from cherished committee chairmanships and assignments under the reorganization plan. But the number of minority berths is cut down, too, and particularly if the Republicans should gain control of the Senate, House, or both, in November, G.O.P. congressional leaders will face a ticklish assignment problem.

Although few key spots are affected by the reorganization plan as finally adopted, abolition of several committees probably will be revoked as many members holding chairmanships and high-ranking positions on these committees find themselves forced far down the ranks in the remaining committees.

• **Generally in Same Hands**—With seniority still the abiding rule, the important business of Congress will, generally, remain in the hands of

prominent Democrats who have been running it for years or, if the Democrats lose control, shift to high-ranking Republicans.

The two tax committees—Senate Finance and House Ways & Means—will continue to be headed by Sen. Walter F. George of Georgia and Rep. Robert L. Doughton of North Carolina, if the Democrats stay in the saddle. Sen. Arthur Vandenberg of Michigan probably would head the Senate Finance Committee if the G.O.P. gains control of that body—generally considered improbable. It's possible, however, that Vandenberg might be offered the chairmanship of the Foreign Relations Committee, where he is outranked only by Sen. Arthur Capper of Kansas, who might prefer the Agriculture Committee post. Next Republican in line for the Finance chairmanship is Robert A. Taft of Ohio, who has had his eye on it for a long time.

• **Army-Navy Change**—The Democratic outlook for the two Appropriations committees has no complications. The present chairmen, Sen. K. D. McKellar of Tennessee and Rep. Clarence Cannon of Missouri, would retain these posts. Sen. Styles Bridges of New Hampshire has a clear field for the Senate chairmanship if the G.O.P. gains control, while veteran Rep. John Taber of New York would get the House chairmanship.

Most important change—especially in view of the battle over the Army and Navy merger—will be in the

chairmanships of the new Armed Services Committees of the two houses. Should Democrats retain control of both Senate and House and if Sen. David I. Walsh of Massachusetts wins his campaign for reelection, both combined committees will be headed by former chairmen of the Naval Affairs committees. Chairmen of the Military Affairs committees in both bodies, including well-publicized Rep. Andrew J. May of Kentucky, will be forced to back seats. Rep. Carl Vinson of Georgia will head the combined committee in the House.

• **To Split Committee**—Most House members now hold only one major committee assignment, but in the Senate, reduction of assignments to two for each member will present individual problems. For instance, the Senate Commerce Committee will be split, with waterway matters going into the new Public Works Committee and the remainder of its functions into the Interstate & Foreign Commerce Committee. Ailing Chairman Josiah Bailey, who has been absent from the Senate for months, may have to choose which end to take.

Similarly, Sen. Pat McCarran of Nevada, sponsor of much aviation legislation in the Commerce Committee, probably will lift himself out of the aviation picture. He doesn't want to relinquish chairmanship of the Judiciary Committee, and has indicated he will select Appropriations for his second assignment.

EXPLORING HERCULES LAND

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FOR INDUSTRY

older civilians, in the main, are far-sighted. Thus the disposal of a half million pairs of surplus lens blanks presents something of a problem. Lens makers have advised WAA that the best bet probably is to work them off on servicemen turned civilians.

THE COVER

When Curtis E. Calder put his name at the end of the recently issued fortieth annual report of Electric Bond & Share Co., he was signing a story that covered at least 31 states and twelve foreign nations.

If he could make readers of all the customers for all the electric, gas, and other utility services in which E. B. & S. has an interest, the report would boast a print order of over 5½ million. And this still wouldn't touch one increasingly important sector of his "market"—the nonassociated airlines, banks, coal mines, hotels, department stores, railroads, and other enterprises for which a unique subsidiary, Ebasco Services, does consulting jobs formerly rendered only to utility associates.

If you didn't know that Electric Bond & Share's chairman was born in Winfield, Kan. (May 15, 1890), you would put him down as "one of those big Texans"—and be right enough, at that. He rode into New York by way of Texas, where he became an official in the big utility setup in 1913, and he still retains a strong flavor of the Southwest. In 1927 he moved up to the presidency of American & Foreign Power Co., the unit through which E. B. & S. controls its big group of foreign power properties—principally in Latin America but also in such distant lands as India and China. Two years ago he went on to the chairmanship of Electric Bond & Share's board.

In his present position Calder has had special opportunities for becoming an authority on the world's accelerating rate of change. E. B. & S. is itself in a state of transition that opened in 1935 with the passage of the holding company act, whose "death sentence" clause authorized the Securities & Exchange Commission to bring about a drastic geographic and economic integration of holding company systems. The eventual shape of his own company depends on SEC action on plans now before it, and on court action still pending. One outcome suggested in the fortieth annual report is a wide extension of E. B. & S. capital investment and services among new and old lines of enterprise that will carry it far afield from the public utility business.

The Pictures—Acme—17, 22, 30, 38, 86, 97; Harris & Ewing—36; Wide World—59, 98; Bachrach—89; Union Voice—84.

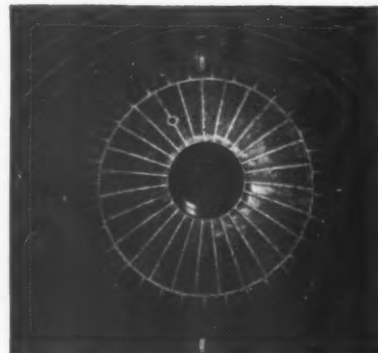


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FIVE PLANTS SERVING THE WEST

THE OUTLOOK

BUSINESS WEEK

SEPT. 7, 1946



Forehanded friends of the farmer already are hatching plans to take care of agricultural surpluses, if and when we run into them again.

Talk in influential quarters is of building an "ever-normal granary" larger than any past surplus storage plan.

The arguments in favor are plausible. They run like this:

We want "full and balanced" production of food and fiber, not only for a higher standard of living at home but to improve the lot of backward areas abroad. To achieve this, the farmer needs assurance against sudden and violent fluctuations in prices and income.

•
Behind advocacy of record peacetime food production and a higher standard of living is a whisper of "national security."

We had saved up surplus grain and cotton in the ever-normal granary before the war. This all came in very handy. Hence, some in Washington argue, we should spur output and lock up anything left over.

Thus the more we overproduce, the "safer" we presumably would be. If you ask these people, "Safe from whom?" they just look wise.

•
If the Washington authorities set up ample safeguards for the farmer, he can go right ahead producing as though nothing was going to happen—and scarcely feel it when it does happen.

Already he is assured of price supports until two years after the Jan. 1 following cessation of hostilities—whenever that may be.

Now the proposal is to protect him against longer-range surpluses.

Proponents of this latter plan recognize that, even so, a surplus is a surplus no matter who holds it. If Uncle Sam is to own a billion bushels of wheat and another billion of corn, markets will feel it.

But prices won't go down as they would in an unprotected market.

•
Weakness in agricultural panaceas is that they rigidify output.

If the farmer does business in a protected market, he goes right ahead producing the same things he has always produced. His farming ceases to be responsive to supply and demand.

This sort of inflexibility is what many true friends of the farmer want most to avoid. They know that the inevitable outcome must sooner or later be hard-and-fast government rules on what and how much to plant.

•
Stamp plans to improve the diet of low-income families by giving them surplus food below market prices have much social appeal.

But these, like other government aids to agriculture, can develop byproduct shortcomings. They, too, can protect the farmer from his own mistakes, thus tending to perpetuate the errors.

For instance, the government may recommend a cut in potato acreage. The farmer says, "Ah! We'll have a short crop; I'll plant more."

The result is a burdensome surplus. Does the congressman reprimand his farm constituent? Far from it. He yells, "Help him out!"

•
Mechanization of agriculture will continue to raise the production potential. Even now, our farms can produce more than consumers can buy.

We have more than 2,000,000 tractors on farms now. The number

THE OUTLOOK (Continued)

BUSINESS WEEK
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will probably rise, to 2,500,000 by 1950. Each new tractor (other than replacements) means that some farmer can grow more.

And, aside from raising efficiency, each added tractor frees acreage that previously fed horses and mules.

Agriculture's ability to produce more than it can sell is the basic argument of those who favor federal controls.

They talk, perhaps conscientiously, of "minimum" restrictions. But they are convinced that the pattern of farm production needs to be shaped to the pattern of potential demand.

And they can cite some results of the past dozen years, something more than just higher farm income.

Yields of many crops have been sharply increased by better land utilization and improved cropping practice. Marginal acreage taken out of cotton, for example, now raises feed for livestock. All to the good.

But the weakness is that one control tends to breed another. We may forget that, now that the accident of war has removed our surpluses.

Bumper crops now being harvested, plus higher prices in effect since June 30, assure farmers a record cash income in the last half of 1946.

Not only will the 3% decline for the first half be made up, but the 1946 total should top \$23 billion, up \$1½ to \$2 billion over last year.

Net income, however, will show a much smaller increase over the estimated \$17 billion for 1945 because of mounting farm expenses.

Next government worry is due to arise from higher costs of farming.

Prices of the things the farmer buys are now rising faster than the prices of what he sells. That runs the parity ratio against him.

Earlier it was the other way around. When ceilings came off in July, farm prices staged the sharpest rise in the 37 years for which records have been kept. The index soared 25 points in the month ended July 15.

That carried farm prices to 244% of the 1909-14 average.

Prices the farmer pays went up, but not nearly that fast. Result is that the ratio of prices received to prices paid went substantially in favor of the farmer, rising to 123% of parity.

Now, however, meat prices have been rolled back and most other farm prices seem to have temporarily stabilized. But industrial prices are rising and will continue to rise as OPA makes required adjustments.

It is this change in trend that will turn parity against the farmer.

Any decline in the farm parity ratio will be a danger signal for Washington. The automatic supports for most farm products come in at 90%.

Most farm prices now are way above 90% of parity, of course. Eggs alone were down to the support price on July 15; the only other crop below 100% was peanuts at 94%.

Commodity prices, so far, have shown a lot more confidence in the present outlook than have stocks. While share prices have been tumbling (page 102), most commodities have been steady.

Farm prices, on the whole, have been a bit shakier than industrials.

Chemical Activation and Heat Dispersion in RUBBER	Rust Prevention in GALVANIZING	Forming Properties in METAL POWDERS	Application and Color Permanence in PRINTING INKS
Deep Drawing in BRASS	Chemical Reducing Agents and Fire Retardance in TEXTILES	Resistance to Chemical Change and Temperature Variation in CERAMICS	Processing and Wearing Qualities in LINOLEUM
Durability and Color in PAINT	Non-Toxic, Protective, and Mildly Astringent Qualities in PHARMACEUTICALS	Formability and Corrosion Resistance in STAMPINGS	Covering Power and Adhesion in COSMETICS
	Fluorescence and Phosphorescence in PLASTICS	Opacity, Whiteness and Brightness in PAPER	Deoxidizing and Alloying of STEEL AND IRON

High Speed Production,
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DIE CASTINGS

Another field served with Horse Head Products

13 structural and mechanical die castings are used in the assembly of this typewriter.



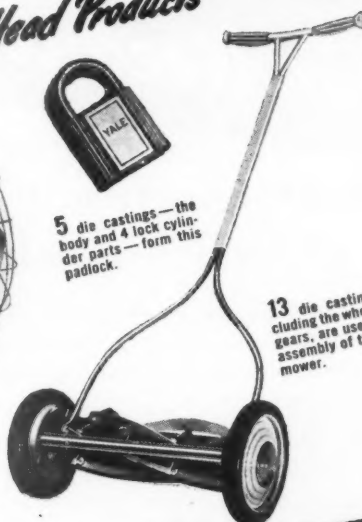
7 die castings comprise the principal construction elements of this electric fan.



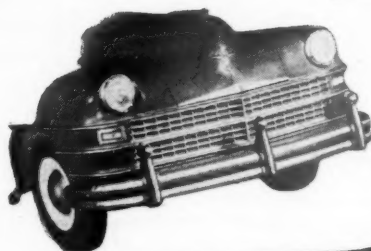
5 die castings—the body and 4 lock cylinder parts—form this padlock.



13 die castings, including the wheels and gears, are used in the assembly of this lawn mower.



13 die castings form the radiator grille and front fender moldings on this 1946 car.



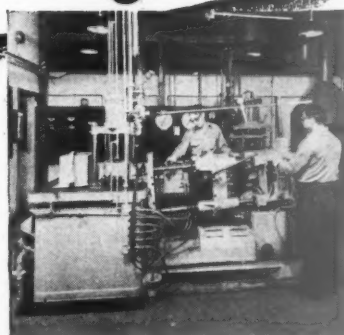
HIGH SPEED PRODUCTION

Die Casting—the rapid production of accurately dimensioned parts by forcing molten metal under pressure into dies—is not a new manufacturing process. But the present high place of die casting in industry can be dated from the introduction of the now widely used zinc die casting alloys—developed by our research laboratories.

The superior strength, stability and casting properties provided by these zinc alloys, together with improvements in die casting technique, have resulted in greatly expanded markets for the die casting industry. The modern automobile, for example, uses from 25 to more than 100 lbs. of zinc alloy die castings, depending on the make and model of the car. These castings range from radiator grilles (above) to mechani-

cal parts such as carburetors and fuel pumps. In addition to excellent physical and mechanical properties, zinc alloy die castings are easily finished with either plated or organic coatings.

Our activities in the die casting industry should be of interest to you for two reasons. First, because zinc alloy die castings are used extensively in the assembly of many things you buy or produce in addition to automobiles—business machines, hardware, small tools, electrical appliances, etc. Second, our contributions to the die casting industry indicate our broad research and manufacturing experience gained in serving this field and the many others listed above. If you feel that this experience places us in a position to be of service to you, write to our Technical Service Division.



This commercial die casting machine is just one of the many devices used in our research laboratories for the advancement of zinc alloy die castings.

THE NEW JERSEY ZINC COMPANY

160 FRONT STREET, NEW YORK 7, N. Y.



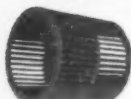
HEAT... where You Need it — and when You Need it!

Use CLARAGE Unitherms in any Type of Industrial Building

Besides cutting fuel costs, Clarage Unit Heaters will help your plant maintain *top-level production* so dependent upon healthy, comfortable temperatures.

If you're still using wasteful coils, cast iron radiation, or obsolete unit heaters — investigate the features of our Unitherm Units!

FEATURES!



Centrifugal Fans



V-belt Drive

(1) Syncrotherm Control (exclusive improvement) maintains uniform temperatures with relatively **LOW TEMPERATURE AIR** — lower operating costs. (2) Centrifugal fans — one for each heater outlet — delivering heat over wide areas. (3) Square outlets for easy adjustment to four directions of heat flow. (4) V-belt drive insures quieter operation, greater flexibility of fan speed. (5) Every part accessible by removing front or back section of casing . . . Built in liberal range of sizes, operating on steam or hot water.



Adjustable Square Outlets

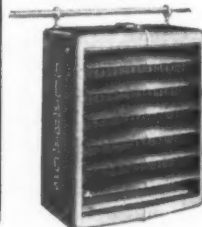


SUSPENDED UNITHERMS — save valuable floor space. Same design as floor type units, including bent-tube safety coil construction.

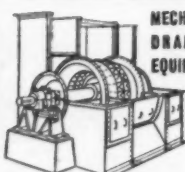
One of over 100 floor type Unitherm Heaters installed in steel plant. This company has re-ordered eight times. Yes, Clarage Unitherms do the job!

And for Smaller Jobs

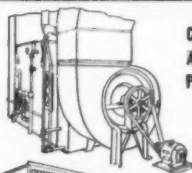
Clarco Unit Heaters (at right) are for small space heating, and for "spots" where more heat is needed than present equipment can supply. Exceptionally quiet — ideal for offices and stores as well as factory service. Wide range of sizes, using steam or hot water.



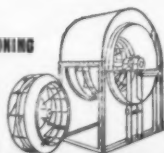
SOME OF OUR OTHER PRODUCTS



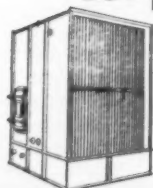
MECHANICAL DRAFT EQUIPMENT



CENTRAL STATION AIR CONDITIONING PLANTS



AIR CONDITIONING AND VENTILATING FANS



AIR WASHERS

Sorry, but the large volume of orders already accepted prevents deliveries for 1946 heating season. We would, however, appreciate an opportunity to figure your future unit heater requirements.

CLARAGE

FAN COMPANY

Kalamazoo, Michigan

APPLICATION ENGINEERING OFFICES IN ALL PRINCIPAL CITIES



FIGURES OF THE WEEK

THE INDEX (see chart below).

\$ Latest Week	Preceding Week	Month Ago	Year Ago	1941 Average
*183.2	†183.5	183.2	176.5	162.2

PRODUCTION

Steel ingot operations (% of capacity).....	84.5	89.4	89.0	74.9	97.3
Production of automobiles and trucks.....	73,305	†91,360	79,385	13,845	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$17,045	\$17,734	\$21,109	\$6,281	\$19,433
Electric power output (million kilowatt-hours).....	4,404	4,444	4,351	4,137	3,130
Crude oil (daily average, 1,000 bbls.).....	4,833	4,836	4,881	4,876	3,842
Bituminous coal (daily average, 1,000 tons).....	2,036	†2,011	2,083	2,029	1,685

TRADE

Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars).....	85	84	85	77	86
All other carloadings (daily average, 1,000 cars).....	63	64	67	66	52
Money in circulation (Wednesday series, millions).....	\$28,376	\$28,365	\$28,245	\$27,600	\$9,613
Department store sales (change from same week of preceding year).....	+40%	†+92%	+33%	+6%	+17%
Business failures (Dun & Bradstreet, number).....	28	17	14	16	228

PRICES (Average for the week)

Spot commodity index (Moody's, Dec. 31, 1931=100).....	332.8	345.6	350.7	254.5	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)....	202.8	203.3	208.9	168.0	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100)....	303.4	†307.3	311.0	224.3	146.6
†Finished steel composite (Steel, ton).....	\$64.45	\$64.45	\$64.45	\$58.27	\$56.73
†Scrap steel composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$19.17	\$19.48
†Copper (electrolytic, Connecticut Valley, lb.).....	14.375¢	14.375¢	14.375¢	12.000¢	12.022¢
Wheat (Kansas City, bu.).....	\$1.95	\$1.94	\$1.94	\$1.60	\$0.99
†Sugar (raw, delivered New York, lb.).....	4.20¢	4.20¢	4.20¢	3.75¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	36.15¢	35.84¢	34.17¢	22.38¢	13.94¢
†Wool tops (New York, lb.).....	\$1.330	\$1.330	\$1.440	\$1.330	\$1.281
†Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	22.16¢

FINANCE

90 stocks, price index (Standard & Poor's Corp.).....	127.9	137.0	142.7	122.9	78.0
Medium grade corporate bond yield (30 Baa issues, Moody's).....	3.04%	3.03%	3.03%	3.25%	4.33%
High grade corporate bond yield (30 Aaa issues, Moody's).....	2.52%	2.51%	2.50%	2.62%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	1½-1½%	1½-1½%	1½-1½%	1.00%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	¾-¾%	¾-¾%	¾-¾%	¾%	1-¾%

BANKING (Millions of dollars)

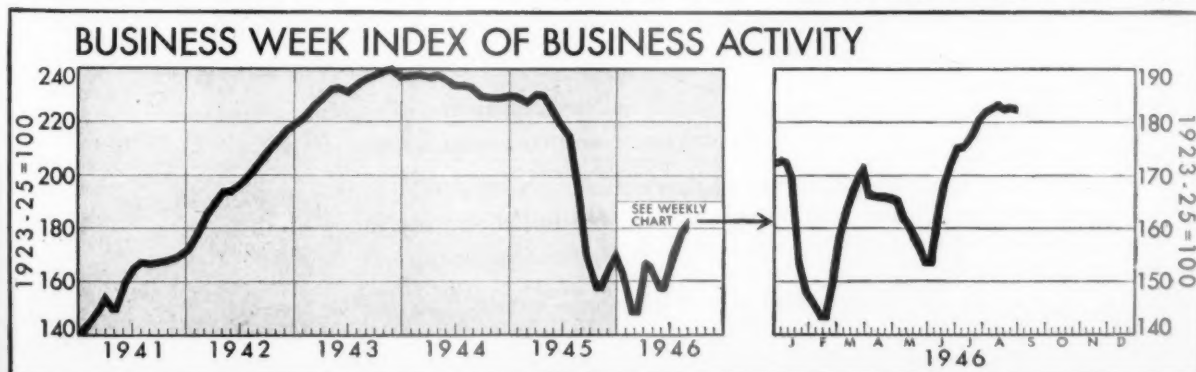
Demand deposits adjusted, reporting member banks.....	39,303	39,170	39,362	38,140	23,876
Total loans and investments, reporting member banks.....	59,983	60,030	60,662	62,546	28,191
Commercial and agricultural loans, reporting member banks.....	8,496	8,416	8,018	5,982	6,296
Securities loans, reporting member banks.....	3,067	3,105	3,441	4,256	940
U. S. gov't and gov't guaranteed obligations held, reporting member banks....	41,463	41,571	42,269	46,371	14,085
Other securities held, reporting member banks.....	3,442	3,438	3,481	3,334	3,710
Excess reserves, all member banks (Wednesday series).....	790	890	890	986	5,290
Total federal reserve credit outstanding (Wednesday series).....	24,102	24,109	24,165	23,063	2,265

* Preliminary, week ended August 31st.

† Revised.

‡ Ceiling fixed by government.

§ Date for "Latest Week" on each series on request.





Want to Meet a Nice Big Family?

Telephone workers make up a big family—over 575,000 in the Bell System.

They are your friends and neighbors and they aim to be nice people to meet and know and do business with.

You'll find them everywhere. For the Telephone Company is mainly a local business, multiplied by the many localities it serves, and operated by home-town people.

We're proud of our telephone family. You can be too.



BELL TELEPHONE SYSTEM

Labor Market Is Tightening

Industry, finding it increasingly difficult to get help, will have problem of holding productivity and costs in balance. Vacationing veterans are only readily available pool of new workers.

Industry today faces the toughest manpower situation since the end of the war. For, with the passing of Labor Day, various seasonal phenomena bring us one step closer to what many economists believe will prove a severe stringency in the labor market.

On the plus side, workers will be released from certain seasonal pursuits, notably agriculture. But more than offsetting this movement will be the return to school of youngsters who have worked through vacations and the disappearance of certain other summer-time laborers.

Already there are symptoms of a labor market tight enough to give personnel departments headaches. Reports from most important industrial areas (box, page 16) indicate scarcities of most types of skills. Many companies that would prefer to hire men find it necessary to seek women production workers; others are revising their ideas on taking on older men; more consideration is being given to the possibility of reviving wartime on-the-job training.

• **Among the Problems**—And here are some of the problems that go hand in hand with such a tightening of the labor market:

(1) The quit rate, which has fallen 25% in a year (although still well above prewar levels), will start to rise again.

(2) Similarly, when jobs are easy to get, worker-effort doesn't tend to rise.

(3) Absenteeism will rise if employment of women and older men goes up.

(4) The accident rate, which hasn't declined appreciably since the end of the war, can't be expected to improve with more marginal workers on jobs.

• **Cost Factor**—All in all, productivity and costs will have to be resurveyed. It may, in fact, prove cheaper to pay more overtime to present workers than to risk inefficiency and higher unit costs (even though the present cost-price squeeze would seem to dictate, "No overtime").

In order to approach the problem of getting more help, it is essential to understand what has been going on in the labor market.

Behind the growing stringency, of course, are the unprecedented growth in the number of peacetime jobs and the retirement of millions of "emer-

gency" war workers. Nonagricultural employment, according to the best government figures, has gone up by about 3,750,000 in a year. About 5,000,000 war workers have retired which, with the rise in jobs available, has made room for almost all the veterans who have sought work. Unemployment, the barometer of stringency, has risen by only 1,300,000 and shows signs of shrinking rather than rising above the present total of about 2,300,000.

• **Sources of Increase**—The rise in employment has come about despite a decline of more than a million in manufacturing and government jobs. Greatest contributions have been from construction, where well over a million have been hired, and the broad trade-and-service group (including the self-employed, such as shopkeepers), up perhaps as much as 3,000,000.

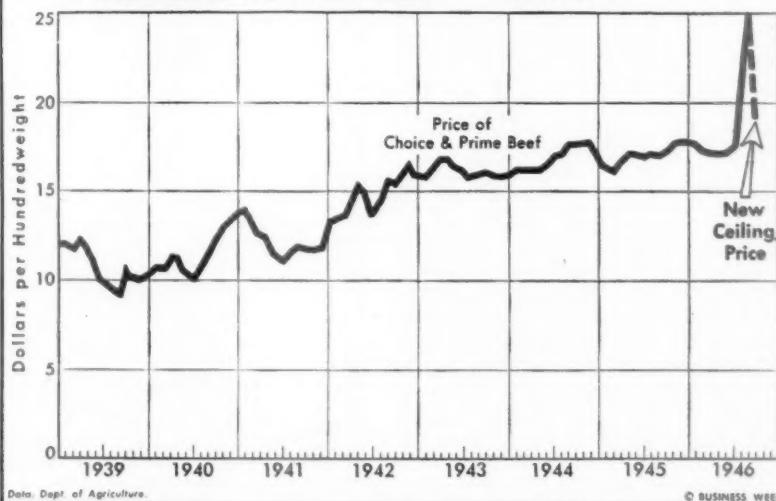
Industry, looking for workers, will probably indulge in some gentlemanly pirating in the trade-and-service field. That's where many war workers came from. But trade and service, hard hit during the war, aren't overstaffed now (as department store advertisements for salesgirls testify). So the over-all stringency won't be reduced in this process.

• **Recallable?**—Another possible source of workers—and it may prove more theoretical than real—is the 5,000,000 who have withdrawn from the labor force in the last year. Yet 3,000,000 wartime emergency workers have been retained. These undoubtedly include most of the highly desirable workers in this group which, at its peak, totaled in the neighborhood of 8,000,000.

Those who have retired are made up mainly of three classes: (1) youngsters who have gone back to school (and the trend to longer schooling is of long standing); (2) men over 45 whom many plants hire only reluctantly (and Uncle Sam no longer is footing the bill for the work of the less efficient); and (3) women, a very large percentage of them veterans' wives.

• **Marriage Boom**—Plants hunting secretarial and clerical help will find that

A COMEDOWN FOR BEEF—OR IS IT?



Cattle prices go back under ceilings at a level about \$2.50 a cwt. higher than that prevailing June 30—but several dollars lower than going prices in July and August even so. You needn't try to buy much beef at the new official prices, though. There are three reasons: (1) Much livestock has been slaughtered lean in the rush to beat reinstatement of ceilings; (2) this is the slack season in livestock marketing (with meat due to be woefully scarce until late October when spring pigs will begin to come to market); and (3) most significant of all, practically all the livestock experts are in agreement that most of the available beef will come through the black market.

the number of women between the ages of 20 and 34 now in the labor force is about a million below what it should be on the basis of prewar experience. The reason for that clearly is the war and postwar boom in marriages and babies. Equally clear is the fact that the number of women seeking work won't come back to prewar normal in the near future.

The biggest single gain in employment over the next year will come from new workers—mostly vacationing veterans, those still to be released from the armed services, and normal growth of the labor force.

• **How Much Net Gain?**—Some of these veterans will bump present workers, many of whom may retire. Estimates vary on the net increase in this process; it probably will be between 1,000,000 and 1,500,000 workers.

Finally, there is the point of bitterest controversy of all—that concerning “rocking-chair money” and the charge that the U. S. Employment Service people are helping workers to remain happily jobless. Almost every locality has its troubles with idleness while jobs go begging.

• **A Large Question**—Time alone will provide a definitive answer on this. There is still a large question whether many workers, as well as veterans, are not drawing compensation as long as they have it coming in the full knowledge that they have retired temporarily or permanently from the labor force. There are veterans who assuredly are vacationing—and they provide the bulk of the million or so new workers who will be looking for jobs over the next year. And there are former war workers, drawing compensation because they

don't want to accept work paying less than they have been making, who sooner or later will take what they can get.

Among civilian workers, there now are more than 1,300,000 listed as unemployed while about 1,200,000 are drawing compensation. Among veterans, 930,000 are listed as unemployed while nearly 1,700,000 are drawing compensation.

Steel Shortcut

Tonnage oxygen, substitute for air in blast and openhearth processes, said to speed output, reduce fuel consumption.

Steelmakers are talking about a major revolution in the technique of iron and steel production, centering about the use of oxygen instead of air in operating blast and openhearth furnaces.

Oxygen speeds up the reduction process, cuts down the scrap melting time in openhearth furnaces, and permits higher output with less coke in blast furnaces. Net result is more production per unit.

• **Canadian Tests**—So important is this development that predictions are being made in some quarters that all blast furnaces may be converted to oxygen within a year to 18 months.

Several concerns are known to be working on the process, but Air Reduction Co. made the first announcement—more suggestive than informative—regarding tests conducted in a 150-ton openhearth furnace of the Steel Co. of Canada, Hamilton, Ont.

Witnessed by operating executives of many American steel companies, the tests showed that scrap melting time can be substantially reduced and production stepped up appreciably with no extra capital equipment. (Some plants, it was conceded, might have to use faster scrap-handling facilities.) The new method had no apparent effect on the furnace lining, Airco said.

• **New Oxygen Product**—Oxygen was introduced into the furnace in what Airco described as “a novel way,” to produce a controlled flame which was directed at the furnace charge during the meltdown period. No other details of the process were revealed.

Airco was even less informative at this early stage regarding the oxygen used and the manner of producing it. To replace free air in steelmaking, oxygen would have to be cheap and plentiful. But it would not have to be as pure as commercial oxygen sold by Airco and others. Airco presumably believes it has solved this problem, appropriately calls the product “tonnage oxygen.”

Skilled and Unskilled Are Harder to Find

Ability of any plant to hire the workers it needs will vary from city to city; yet there are striking similarities in reports from Business Week representatives in industrial areas all over the country.

Employers generally are choosy, tending to return to prewar qualifications as to age, sex, nationality, and color.

• **Slow to Accept**—Employees are slow to accept jobs paying lower hourly rates than they earned during the war or to take jobs promising 40 hours or less work per week regardless of the basic hourly wage.

Industry can't find workers with the skills it needs nor enough common labor. Semiskilled workers, generally, are to be had.

There aren't enough truck driving jobs to go round; veterans who had a crack at such work in the Army are flooding the market. Yet veterans frequently don't have the skills that industry is bidding for.

Employers are beginning to look for women production workers much sooner than they had expected would be necessary.

• **By Cities**—Those are the generalities. Here are some particulars:

Detroit has surpassed its peacetime peak employment, with the Board of Commerce payroll index standing at 139.2 (1923-25 equals 100) at the middle of August. Previous top was 137.8 in March of 1929. With scarcely 100,000 now unemployed, local U. S. Employment Service officials expect to have to recruit in other areas if manpower needs are to be met.

Cleveland area employment is up 8% from a year ago with 571,000 working and about 46,000 unemployed. Very scarce are diemakers, machinists, tool grinders, sheet metal workers, machine tool operators, carpenters, bricklayers, stenographers and clerical workers, draftsmen, and nurses.

• **Few Shortages**—New Orleans has but few shortages. Even stenographers are a little more plentiful than heretofore. Jobless total is 23,500 with about 2,500 new openings expected within 60 days.

Atlanta area employment is put at 257,000; about 20,000 are unemployed with 3,500 new openings expected shortly.

Philadelphia has only a few shortages at the moment but anticipates more from now on. Food packing is tight seasonally and tobacco plants have trouble getting girls. Stenographers are hard to find.

• **Women Wanted**—Chicago and downstate Illinois cities are experiencing surpluses of men, shortages of women. Among men, highly skilled tool and diemakers, machinists, and cabinet makers are not to be found.

California employers charge USES with encouraging idleness; USES counters that employers want workers under 35 and that they want neither women nor Negroes. Workers with shipyard experience only don't have the skills called for in most available jobs. Lumber companies on the West Coast have been forced to cancel night shifts for want of skilled labor.

Goods-Sharing Is a Science

Allocation of scarce products according to a quota system fits needs of most manufacturers, but some seek long-range advantages that accrue from gearing distribution to market's potential.

How can a manufacturer of scarce consumer goods best allocate them to his distributors?

Many a one who blithely decided that V-J Day ended any need for an answer today is fumbling for a share-the-goods scheme.

To find it for him, *Business Week* representatives have canvassed leading manufacturers in nine major areas: Greater New York, Chicago, San Francisco, Los Angeles, Buffalo, Detroit, Philadelphia, Cleveland, Cincinnati.

Part I of these findings—dealing with manufacturers' allocations of scarce consumer goods—is presented herewith. Part II—allocation of capital goods—will appear in an early issue.

Broadly speaking, manufacturers who currently allocate scarce consumer goods have evolved four main systems:

(1) **First come, first served.** Although a handful of firms adheres to this plan, it is, of course, hardly a system at all. It has innumerable drawbacks. It fails to provide adequately for old customers and is full of loopholes for duplicate orders and hoarding.

(2) **Allocations to fit peculiar needs.** This one includes a host of systems—no two of which are alike—generally devised by new manufacturers or regional sellers with local difficulties.

(3) **Allocation by market potential.** Here is the platinum-plated method that's supposed to gear distribution to (a) population changes, (b) changes in the pattern of national income, (c) changes in the number and character of merchants and yet, (d) adequately provide for old customers. Manufacturers of household appliances (who usually have a better check on distribution than the soft goods fraternity) should investigate this system carefully. But it is expensive, complicated, tricky. For that reason many a manufacturer shies away from it.

(4) **Allocation by quota.** The majority of firms votes for this one. It is the most simple, common-sense way to take care of old customers, and it is relatively cheap to operate. It has plenty of drawbacks, but is flexible enough to get around most obstacles, and is certainly better than nothing at all.

In the majority that votes for the allocation-by-quota plan are plenty of big names. They include General Foods, United States Radiator, Chicago Flexible Shaft, Procter & Gamble.

• **How It Works**—Here is how General Foods—92% of whose output is still in short supply—operates the quota plan:

For a base period, the first full twelve months prior to rationing or production limitations are used. Individual wholesalers receive the same percentage of current output that they received in the base period. Then it's up to the distributors to allocate supplies to retailers.

It's as simple as that. The beguiling lack of red tape has endeared allocation by quota to war-weary manufacturers who are sick of the monstrous complications that have encumbered them for five and more years. But it is important to note that almost every practitioner of allocation by quota cogently mixes his praise with criticism. Here are some typical rubs:

• **Base Period:** If a customer's quota hinges on the total of dollars he spent during the base period, there is room for much complaint. For instance: Distributor A in 1941 bought 50 suits at \$20, or \$1,000 worth of merchandise; Distributor B bought 25 suits at \$40, also totaling \$1,000. Should both get the same allocation now? Remember that your decision affects not only your distributors but—importantly—your salesmen, too.

• **Unit Yardstick:** If, instead of using dollars, you use units as a criterion, be

prepared to hire an army of bookkeepers. And even after all the mathematics, complete justice may not result. The war has wrought so many changes in grades and quality that comparison with the prewar pattern is all but impossible.

• **New Distributors:** How to make room for newcomers under the allocation-by-quota system is a problem. Many manufacturers simply don't take on any more distributors, and thus solve the situation by ignoring it. One out: Set aside a certain percentage of production for new distributors, then allocate the remainder to old-timers.

• **Other Drawbacks:** Since the allocation-by-quota scheme is primarily intended to please old dealers, it is difficult to cut them off when their shops are deteriorating, or their area is on the economic wane, without a lot of bother. Chain stores will clamor for more than their share on the grounds that they are expanding. Salesmen keep complaining that the system holds them down too drastically if their territory is a live one.

By contrast, the market-potential method is much more scientific. But its complications are comparatively forbidding.

• **Case Studies**—Here are some case studies:

Zenith Radio Corp. has figured out a "normal sales potential" for every county in the U.S. The potential has been weighted for population changes. All distributors—old, plus a few new ones—thereupon get an allocation re-



DIGGING IN ON THE PROMOTIONAL FRONT

Seasoned with sex appeal, even prosaic items like soft coal and shovels make news. At Bluefield, W. Va., "Miss Bituminous" (left) displayed garb of coal derivatives to call attention to her home state's major industry and the Southern Appalachian Industrial Exhibit. In New York, "Miss West Virginia" presented Mayor O'Dwyer a shovel—to boost Parkersburg and its Ames Baldwin Wyoming Co., shovel makers. But she had to apologize for her agent, who suggested it would be handy to clean up New York.

flecting (1) normal requirements reduced by (2) the percentage amount of product shortage.

Eureka Williams Corp. has a roughly similar system. The buying potential of the nation in "normal" times is set down as 100%. If a certain district historically buys, say, 6% of all consumer goods, Eureka now allocates to it 6% of Eureka output. Inside the district, the allocation is broken into sectional divisions which in turn are correlated with distributor territories. Like Zenith's plan, Eureka's makes room for new distributors.

• **Advantages**—Systems such as these have great flexibility in providing for new dealers, changes in population, changes in buying power, and as many other shifting economic factors as the manufacturer wishes to include. They also provide formidable alibis when dealers and salesmen complain about being neglected. And, once started, this type of research may pay off in later years in that it makes the manufacturer aware of the general economic climate in which he must operate.

But the expense involved and the risk of getting phony data from poor researchers loom as important considerations.

All in all, Business Week's investigation would seem to point to the following conclusions:

(1) If your product is in short supply—and shows signs of remaining so—

some type of allocation system is better than nothing at all. You owe it to your dealers and your salesmen.

(2) An inexpensive method is the quota system. It works reasonably well, and has considerable "stretch."

(2) The market-potential method has longer-range benefit and is probably superior for hard goods manufacturers, but is tricky, expensive, and calls for experts.

• **Order Duplication**—By way of significant sidelight, the study indicates that manufacturers are not plagued by duplicate orders to the extent that some economists believe. Since many producers allocate scarce consumer items, it is useless for distributors to over-order. And since the distributors are virtually tied to regular sources of supply, there's little point in attempting to get goods from new sources. Order duplication, say the manufacturers, occurs chiefly at the consumer level (BW—Aug. 31 '46, p46).

HELIUM GAS DETECTIVE

A new technique which employs helium as a detective to report on the movement and extent of underground deposits of oil and gas is being widely investigated and adopted by producers.

Developed by the Bureau of Mines and the Navy at the Navy's Elk Hills oil reserve in California, the method utilizes the chemical inertness of helium

which permits the gas to enter a stream of liquids or other gases and emerge unaltered.

In practice, helium is injected into wells, and by observing the outlets at which it emerges, data are obtained on the contour and extent of the reservoir, while helium concentration gives an index to its character and extent. The technique is of special value where it is desired to recycle gas—returning it to the ground for storage, or to increase underground pressure and force out more oil.

A key to the development of the technique was the invention by E. M. Frost, Jr., bureau chemical engineer, of an apparatus for quick and accurate determination of the helium content of hydrocarbons. Previous quantitative methods were too slow.

HUPP WON'T MAKE CARS

You can brush off rumors that Hupp Corp., which prior to July 1 was known as Hupp Motor Car Corp., will go back into the automobile business. R. S. Geddes, president, says the company has no idea of spending the \$3,000,000 (at least) that such a venture would entail in the face of today's competition.

The rumor of a new Hupp car got started from the company's constant scouting for castings, stampings, and other parts for the two automobile companies that are among the eight big customers now taking the entire output of its Detroit and Cleveland plants. And as long as this business continues brisk, Hupp will hold up its contemplated production of household appliances, including the new type stove, gas or electric, and ironer that it is known to be keeping under wraps.

HAWAII PROMOTES TIMBER

Hawaii which has always viewed forestry in the light of erosion control and watershed protection now wants to encourage the cultivation of timber.

The Army demonstrated timber possibilities during the war by setting up a small saw mill on the island of Kauai which supplied thousands of board feet for military construction.

Colin C. Lennox, director of the territorial Board of Agriculture & Forestry, divides island timber trees into two groups:

(1) Rough timber—for such things as poles and fence posts.

(2) Hardwood—for cabinet work.

The Board of Agriculture is also encouraging the restoration of Indian sandalwood. Sandalwood, which is extremely valuable, played an important part in island economy a century and a half ago, but ruthless cutting destroyed the trees. It is now against the law to cut sandalwood.

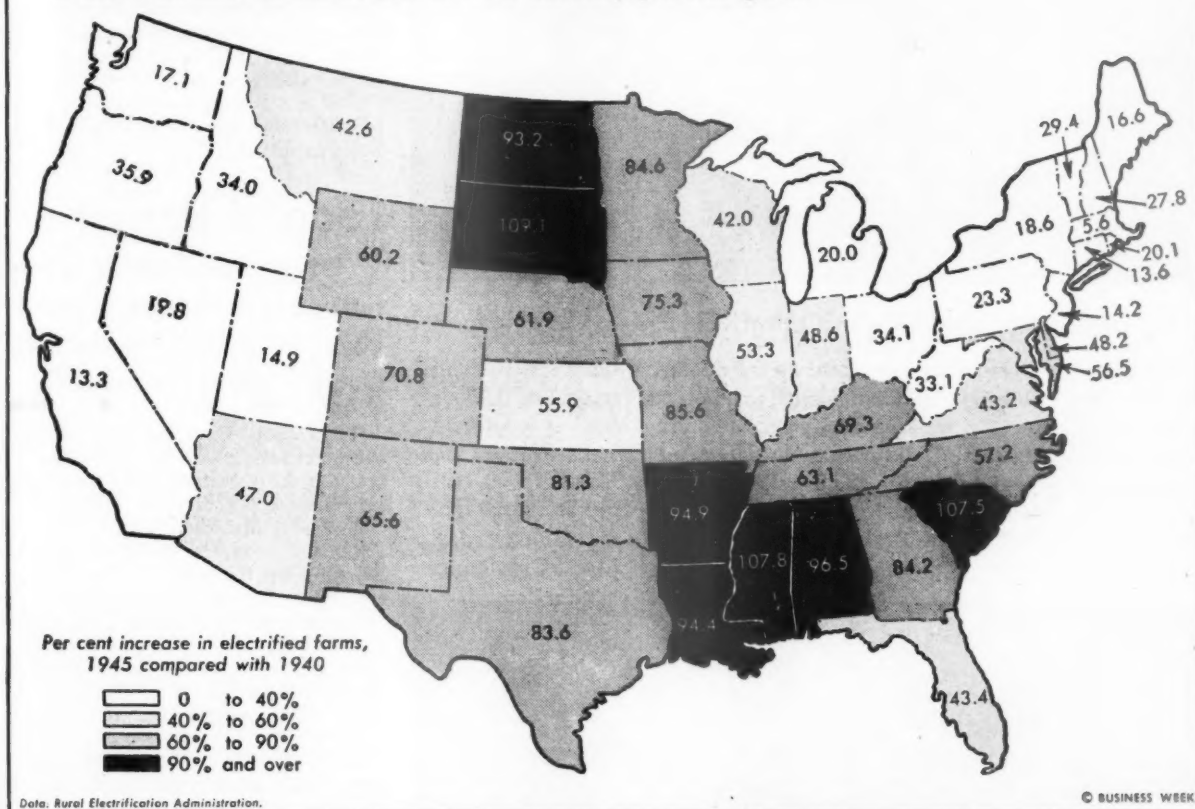


A SURPLUS BREAK FOR SMALL BUSINESS

In answer to widespread complaints that small business was not getting enough consideration in the surplus disposal program, War Assets Administration has established a Small Business Branch headed by John M. Frier (left). As the new branch sees it, it has two chief objectives: (1) to let small businessmen know where, when, and how they can purchase surplus property, and (2) to have surplus materials offered in lots small enough to be within the reach of small business. It is also sponsoring a plan to divide large surplus war plants for occupancy by several separate small businesses.

MORE LIGHT, POWER FOR RURAL AREAS

States with least electrification in 1940 showing greatest gains



Rural Utility Row Flares

With \$550 million to lend in two years, REA pushes its frenzied drive to bring electricity to farmers. Unable to thwart public agency, private companies rush for new customers, too.

The contest between the Rural Electrification Administration and private utilities for the rural power market, limited largely to political jockeying and minor forays during the period of the war, has now broken out again with renewed vigor.

In the first seven months of 1946, REA-backed cooperatives added 100,000 farm customers, the private utilities 175,000, and the two groups are aiming at a combined goal of 450,000 for the year.

• **Bid for \$550 Million**—During the frenzied line-building activity of 1940 and 1941, electric power was extended to an increasing number of farms. The natural result was that states with the least electrification have shown the greatest percentage gains during the five years ended 1945 (map), even though wartime restrictions limited extensions to those lines which could serve a rela-

tively large number of farms with minimum use of materials.

Through the war years REA tried to have enacted by Congress—over private utilities' opposition—a bill which would: (1) authorize it to lend \$550,000,000 over three postwar years, and (2) permit REA to spend, on a nonreimbursable basis, \$5,000,000 yearly in order to see to it that power distributing systems were planned properly from the very beginning.

• **Fund Authorized**—The first provision would remove REA from the vagaries of year-to-year loan authorizations; the second would help further REA's area-coverage principle—service to all farms in an area rather than simply to those on which the service eventually would pay out. (Private companies, for obvious reasons, have not adopted area coverage too widely.)

REA got half a loaf, with a little

butter added. It received the \$550,000,000, with authority to use it in two years (fiscal 1946 and 1947) instead of three.

With this money in hand, REA has been pushing its program aggressively. It has endeavored to beat the materials shortage problem with such devices as lowered standards for scarce wood poles and pole preservatives, has financed the purchase of a Texas pole-treating plant, induced co-ops to expand order-pooling so as to save money and enable them to swing more weight with big suppliers, instituted a policy of not considering bids that are made by any contractors who are simultaneously doing work for private power companies in competitive areas.

• **Line Costs Rise**—Despite all these measures, costs of building distribution systems have risen—from perhaps \$750 a mile before the war to at least \$1,100 today. And since REA loans are supposed to be self-retiring, the higher costs are a threat to marginal projects, where potential customers are widely scattered.

This fact must be kept in mind in interpreting recent REA disclosures that in the fiscal year 1946 it connected 261,000 customers with 50,765 mi. of



ANOTHER MANSION GOES COMMERCIAL

During the war many a company hard up for additional office space adopted the expedient of buying an old, untenanted mansion and remodeling it. Today, with the pressure for working space unabated, the trend is continuing. Recently, Cargill, Inc., Minneapolis grain dealer, purchased a 65-room mansion (above), remodeled most of the interior into offices (below) for its entire administrative staff. The house stands on a 200 acre estate at Lake Minnetonka, 15 mi. out of town, is flanked by a swimming pool and a sunken garden complete with fountains. Cargill has installed a cafeteria for its commuters.



line. Of these 230,000 were previously without electricity; the rest represent acquisition of existing systems and refinancing of some Tennessee and Alabama co-ops that were originally sponsored by the Tennessee Valley Authority.

Private power companies' figures are not directly comparable because they are on a calendar rather than a fiscal year. In 1945 they built 30,900 mi. of rural line at a cost of nearly \$46,000,000. This year they expect to complete 57,382 mi. line and start an additional 32,230 mi. Expenditures will run around \$80,500,000.

• **In Selected Areas**—But the private companies' work is greatest in the most-heavily populated regions, lowest in the rural areas of New England, the Mountain, Pacific, and West North Central states.

ALL ON ONE TICKET

What with the shortage of hotel rooms and office space, and telephones hard to get, a prominent Philadelphia gambler some time ago set up business in that city's Broad Street Pennsylvania R. R. station. First, to assure himself of legal occupancy, he bought a 50¢ suburban ticket—good for a year.

Horse race bookmaking prospered, and the gambler and his henchmen grew bolder as their rent-free and sumptuous quarters appeared to provide ideal protection from the law. They took over a whole bank of telephone booths, discouraged travelers from using them by hanging up "temporarily out of service" signs, thus freeing instruments for incoming calls.

For quite a while the bookmakers were unmolested by P.R.R. police. After

all, they had gone through the formality of purchasing tickets. Arrest might leave the railroad open to suit.

Finally city police stepped in and haled the gamblers to magistrate's court. Result: no prima facie evidence of gambling; fines of \$12.50 for disorderly conduct—loitering.

Still unanswered: How long is a ticket purchaser entitled to use a railroad station's facilities?

Federal Barrier

Private power concerns may run into statutory fence around government hydroelectric sites. Georgia firm applies to FPC.

The Georgia Power Co. has followed the Arkansas Power & Light Co. in applying for a Federal Power Commission license to develop hydroelectric energy at a site where government development is under way (BW—Aug. 24 '46, p. 26), but the prospect of success for either has become increasingly remote.

Actually, Georgia Power goes Arkansas one better. Its application covers not only construction of a power plant at Clark Hill on the Savannah River, 20 miles from Augusta, but the dam as well.

• **Work Delayed**—A.P.&L. applied only for a license to erect the power plant at Bull Shoals dam, on the White River in Arkansas. Like Clark Hill, this site is under War Dept. development.

Recently imposed restrictions on federal construction have held up the Army's preliminary work on Clark Hill. The delay is the immediate reason behind Georgia Power's broader application.

The Georgia Utility needs the energy Clark Hill would produce. It had previously held a license for the project, and it has several million dollars invested there. Construction began in 1930, but the company halted work and surrendered the license because of depression-born fiscal troubles and load loss.

• **Army Protest**—The Army Engineers, who moved in when the government's river development program burgeoned under the New Deal, have lost no time in answering Georgia's application with a promise to fight reissuance of the company's license. The Army assumes that only Congress can change the federal policy on Clark Hill which is implicit in the two acts authorizing War Dept. construction.

FPC lawyers believe that at least two sections of the federal power act preclude granting of a license to a private developer where the government has an interest in development of a site.

Midwest Banks on Research

Seeking more local industries, heavily agricultural states form scientific organizations to find ways of developing regional resources. Emphasis is on farming-manufacturing balance.

Industrialization has long been a magic word in the central states, which nurse the conviction that any predominantly agricultural region gets the short end of the economic stick.

In the past, most of the efforts to lure industry westward came from local booster clubs, chambers of commerce, and similar organizations. In the last few years, however, the campaign has taken a new twist. Agricultural areas of the Midwest now rely more and more on the various public and private research agencies that are trying to put their appeal to industry on a systematic, scientific basis.

• **New Uses**—The Northwest Research Foundation, for instance, has been running a number of long-range projects designed to develop more commercial uses for local products. One of its studies covers lignite and high-volatile coals (BW—Jan. 1'44, p58). Another is uncovering new uses for the humble aspen tree, which covers huge areas in the north central states. The U. S. Dept. of Agriculture has been doing a similar job for various farm products, particularly at its Peoria (Ill.) and Madison (Wis.) laboratories.

One of the newest agencies and in many ways one of the closest to industry is the Midwest Research Institute, Inc., which now is rounding out its second year of operation.

• **Local Development**—Midwest Research set up shop in January, 1945 (after some 18 months of incubation), as a nonprofit corporation ready to take on almost any research job that would promote development of local resources or industries. Its organizers were a heterogeneous group of businessmen, real estate owners, professional men, and farmers. Its headquarters are in Kansas City, Mo. It concentrates most of its attention on Iowa, Nebraska, Kansas, Oklahoma, Arkansas, Missouri.

The institute divides its ordinary work into two classes, industrial projects and regional projects. Industrial projects are undertaken at the request of individual firms, which pay all the costs and get the benefit of any resulting patent rights or commercial applications.

Regional projects are broader and cover problems that concern whole industries rather than just one or two firms. The institute finances them out of its own funds, most of which come from contributions.

• **Right Answer**—Midwest's first industrial project was a problem in recon-

version. Military Chemical Works, Inc., operator of the government's Jayhawk Ordnance Plant at Pittsburg, Kan., wanted to take over the property for peacetime production of ammonium nitrate for fertilizer. Ammonium nitrate is a top-notch plant food, but it has one big fault as a fertilizer. It is hygroscopic; that is, it absorbs moisture from the air and forms into hard chunks. Midwest scientists worked out an answer to the problem, a chemical that draws water out of the ammonium nitrate crystals and at the same time seals them from outside moisture. Its exact nature still is a trade secret, but Military Chemical, its name recently changed to Spencer Chemical Works, is using the process.

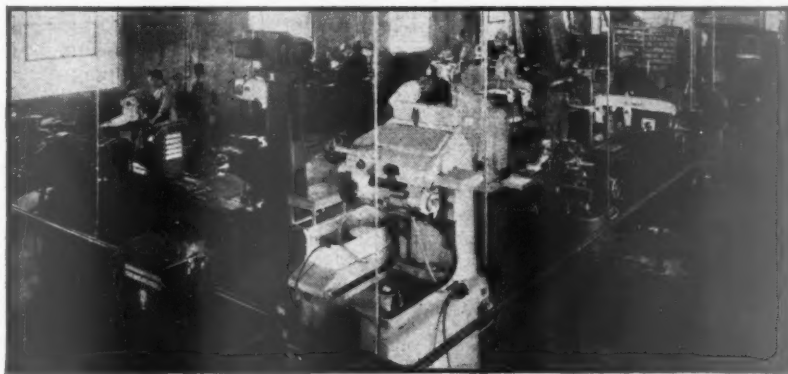
• **Broad Scope**—Midwest now has some 40 industrial projects under way. The roll call runs all the way from developing a new breakfast food for the Carnation Co. to work on fungicides for the Standard Oil Co. of Indiana. The

Army Corps of Engineers has contracted with the institute for a survey of the resources of the Missouri River basin, and Folger Coffee Co. has it digging into the question of what makes coffee go stale.

Regional research projects are directed at the general problem of striking a better balance between industry and agriculture in the six states. Midwest now has 14 of them in the works, including chemical treatment of soft woods to make them more suitable for commercial purposes, nonfuel uses of petroleum and natural gas, utilization of forest and mill wastes, industrial uses for agricultural fibers.

• **Help for Farmers**—One of the most promising regional projects so far has been the search for a surface-hardening treatment for barn yards and feedlots. Practically every farmer who owns a cow has seen his barnyard or feedlot cut up by hooves and turned alternately into a bog or miniature dust bowl. A cheap, effective surface treatment has long been near the top of the list in agricultural research.

Midwest thinks it may have the answer in a method that consists of treating the top four inches of the soil with calcium chloride and then adding a covering of road oil. It won't be sure until the effects of winter snow



The laboratories (above) of Kansas City's Midwest Research Institute (below) test projects designed to lure new industry to the Middle West's farming areas.





Guiding light at Midwest Research is Dr. Harold Vagtborg (above), who as president and director heads up the institute's drive for \$2 million.

and freezing have been checked, but results so far are good. Cost of this coating is expected to run about 11¢ a sq. yd., against about 75¢ for concrete ready-mix.

• **Expansion Drive**—Encouraged by its success in the past two years, Midwest now is making a drive to raise a \$2-million war chest through contributions. About \$1 million would be used for more regional research and the other \$1 million for new buildings and equipment. The institute already has taken in about \$200,000 in subscriptions. Besides that it has about \$500,000 in industrial research contracts. This puts the industrial operations on a self-sustaining basis.

The spark plug in the Midwest organization is President Harold Vagtborg, who came from the Armour Research Foundation, Chicago. Working under him are a technical staff with 50 members and a service staff of 30-odd. The research organization is divided into five sections: engineering mechanics, organic chemistry, agricultural chemistry, applied physics, and inorganic chemistry.

NET INDUSTRY LAUNCHED

Fish nets, requiring hand labor, formerly were imported in large quantities from such cheap-labor centers as Japan and China, and very few U. S. fishing gear concerns made their own nets. Because of this dependence on foreign suppliers the Rands Fishing Equipment Co., Inc., Buffalo, recently found itself unable to fill its orders.

Long a producer of handles for dip and landing nets, Rands decided that if it wanted to retain its customers it would have to make the whole product. John H. Smythe, president and treasurer of the company, first learned how to weave the nets himself, then taught five of his employees who now act as instructors for classes of 20-25 persons seeking home employment. Hundreds of women and handicapped or over-age workers responded to a newspaper announcement of the company's need, and at least one institute for the blind plans to teach its inmates the art of net tying.

When more of the present learners have become sufficiently skilled, they will be sent to applicants' homes as instructors. The company supplies raw materials and pays 50¢ a net for the weaving, workers being required to produce at least ten nets a week. A skilled tier turns out one net an hour.

Ships for Sale

Reconversion of wartime fleet to peacetime pursuits will be speeded by merger of two U. S. shipping agencies.

The shipping industry, traditionally the first to mobilize for war service, and the last to resume normal activities, still is in the throes of reconversion.

The War Shipping Administration's merger with the Maritime Commission this week is expected to speed up the return of the merchant marine to private hands. Its major job completed, WSA, whose thousands of merchant ships constituted a lifeline of men and supplies for the fighting fronts, was liquidated Aug. 31 in accordance with congressional mandate.

• **An Unparalleled Job**—Absorption of WSA by the permanent Maritime Commission closes a chapter of World War II history that records emergency ship operation without parallel. At the time of Pearl Harbor the United States merchant marine consisted of 1,586 ocean-going ships of 1,000 tons or over. Through purchase and requisition for war service and the Maritime Commission's stupendous shipbuilding program, the fleet under U. S. control rose to a total of 5,410 vessels, of which 4,286 were operated by WSA.

Reporting the start made by WSA toward "getting the government out of the ship operating business," Capt. Granville Conway, retiring administrator, says 3,647 ships, or 73.9% of the government fleet, have been disposed of—redelivered to private owners, laid up in national reserve fleets, or scrapped. In addition, 2,148 small vessels have been returned to owners. About 1,300

active ships remain under direct government operation and some 800 more are on charter to private operators.

• **Citizens Come First**—How long it will take to transfer these remaining government-owned ships and a vast number of surplus vessels to private steamship companies depends on the time it requires the Maritime Commission to process applications for purchase of ships under the Merchant Ship Sales Act of 1946. It is taking considerable time to negotiate sales, survey and put ships "in class," and determine amounts of operating-differential subsidy necessary to offset lower-cost operations of foreign competitors.

The Merchant Ship Sales Act has, as its basic policy, the encouragement of an efficient and adequate privately owned merchant fleet. American citi-



FREE SPEECH AND HOT

In a setting reminiscent of U. S. labor meetings, Japan's Congress of Industrial Unions conducts its first constitutional convention in Tokyo. Claiming 1,631,000 members, the left-wing C.I.U. seeks a 40-hour week and unemployment insurance, opposes a pending labor bill stipulating a 30-day "cooling period" before strikes. Its strength lies with communication, public utility, and railway workers, the latter having been virtually ordered by Gen. MacArthur to sidetrack a strike this month to protest the legislation. Japan's other big faction is the right-wing Federation of Labor, which compares with the A.F.L.



*Mustache-Guard, U. S. Pat. No. 220,538, granted 1879.
Patent description supplied upon request.*

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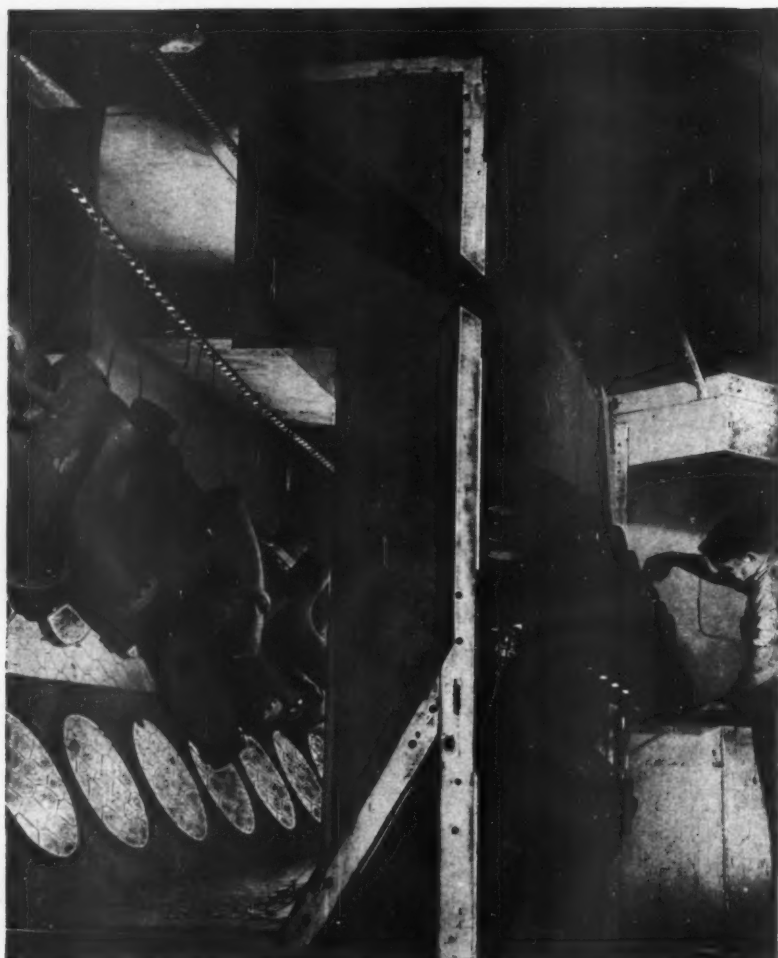
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Parking Paradise

A new and practical twist is given southern hospitality by businessmen of Portsmouth, Va. They recognize that out-of-towners who overstay parking time limits are thereby spending more money in the city. In deference to this fact, the Portsmouth Chamber of Commerce will pay the \$1 over-time penalty for visiting motorists.

• Effective Sept. 1, outlanders who violate the parking limitations between 9 a.m. and 8 p.m. will no longer be greeted with an impolite summons. Instead they will find a tag noting that the C. of C. has paid the penalty and ending with a courtly farewell: "We are glad you have come to Portsmouth and we do hope your visit has been pleasant. Please come again."

zens are allowed first chance to buy or charter the vessels prior to their availability for purchase by noncitizens. The law does not permit ships to be chartered to noncitizens.

• **Chinese No. 1 on List**—Applications for purchase or charter of 1,387 vessels have been received by the commission. Of these, American citizens applied for 374 ships and noncitizens 726. Approval has been given for sale of 190 ships. There have also been applications by citizens for charter of 289 vessels.

Ten foreign governments and private interests in 23 foreign countries have applied for purchase of Liberty type and other ships available to noncitizens.

The Chinese government is the largest applicant for purchase of ships, 159. The totals asked by other foreign governments are France 85 (75 already approved); Italy 50; Netherlands 45 (all approved); Norway 28 (14 approved); Peru, Yugoslavia, and Argentina six each; Egypt four; Ireland two. The largest number of vessels applied for by foreign private interests is for registry under the flag of Panama, 85, with 64 from Norway and 46 from Great Britain next in order.

• **Adjustable Price**—Prices for the war-built ships are established under the formula laid down in the sales act. The sales price is fixed between an adjustable statutory sales price and a price floor, with allowance for war wear-and-tear and normal depreciation. For example, the statutory sales price of a Liberty ship is \$639,000 and the price floor \$544,506, making the sales price adjustable between those amounts.

Purchasers of vessels must pay at least 25% down and the balance in annual instalments over the 20-year life of the vessel, with 3½ per cent interest.

U. S. Payroll Up

Though down from its war peak, federal employment total is at record peacetime figure, not counting military rolls.

Federal civilian employment is now at levels that dwarf all previous peacetime comparisons.

Though falling short of the wartime peak of 3,002,000 in 1943, there were still in June of this year 2,322,000 persons on the federal payroll. This contrasts sharply with the 1,003,000 in 1940, the 617,000 reached under Hoover in 1931 before retrenchment.

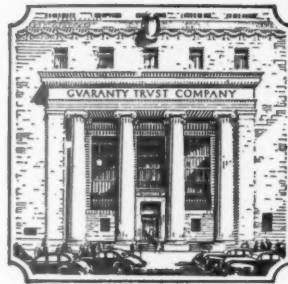
• **Paring Operation**—The present unprecedented peacetime total partially explains why the Budget Bureau, acting upon congressional orders, recently announced plans for lopping off 100,000 jobholders from the payroll. And on Aug. 29 the Army handed out dismissal notices to 53,000 employees. President Truman previously had called for departmental economies to achieve a balanced budget.

But a glance at the accompanying



PUMP AND DRINK

To doom the public drinking cup at the little red schoolhouse, at rural parks and picnic grounds, is the objective of a new "fountain" pump. The thirsty one pumps the handle a few times to build up pressure, then scoots around to the other side to drink. Baker Mfg. Co., Evansville, Wis., also provides its new product with a catch basin underneath where birds and beasts may drink.



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In order to have their securities kept under proper safeguards and at the same time available for sale or other disposition in New York, many hundreds of investors have opened Custody Accounts with us. Some of the important advantages are:

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chart will show that, no matter what temporary success they may have, the President and Congress are bucking an inexorable trend in attempting to push back federal employment. Jobs in the twenties, while below the previous wartime peak, always exceeded prewar levels. Certain aspects of the present situation indicate that employment will not fall much below current levels and may, in a decade or two, exceed them.

• **Army and Navy**—Since no abatement of world unrest is in sight, the War and Navy departments will undoubtedly retain Gargantuan proportions. Civilian employment in the War and Navy departments in the continental United States totaled 1,073,000 last June. That was a 46% reduction from the figure of 1,982,000 in June, 1943, but it represented an increase of 321% over the 1940 total of 255,000.

Most of these workers are employed at arsenals, depots, hospitals, field offices, and military installations throughout the country. With reduction in the armed forces, much work formerly done by soldiers is being done by civilians.

The slashes in military expenditures that took place in the twenties effected a 64% reduction in civilian employees from 237,000 in 1920 to 86,000 in 1927. Thereafter, the trend was slowly upward and the June, 1940, figure of 255,000 employees was slightly in excess of the 1920 total of 237,000.

• **War-Made Work**—Caring for and tidying up the ravaging effects of the more recent war will also take much time and effort. The employment rolls of the Veterans Administration last June were up to 169,000 compared to 40,000 in 1940, an increase of 323%.

The administration, organized in 1922 with 32,000 employees, declined gradually to 24,000 in 1927, and then began a slow upward climb to 40,000 workers in 1940. Of the present employees, 100,000 were taken on in the last year.

Of the nonwar agencies, the largest is the Post Office Dept. Its present total of 487,000 employees marks a considerable increase over the 1913 figure of 292,000. But, since the over-all government employment has grown at a much greater rate, postal employees now represent only 21% of the government total contrasted with 63% in 1913. The department experienced very little real growth between wars, and its 1940 total was only a few thousand over its 1913 figure. Wartime expansion was very heavy in response to increased demands at home and the problem of getting mail to servicemen overseas.

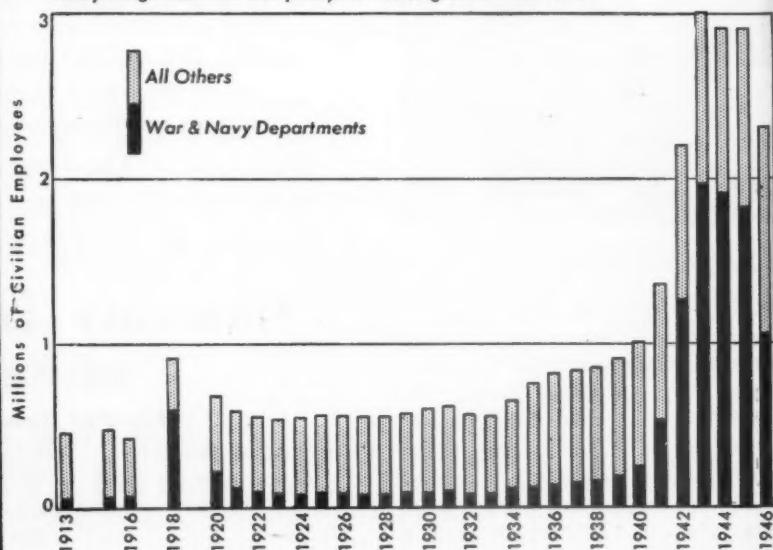
• **Taxes Create Jobs**—The rise in income tax rates, accompanied by a lowering of exemptions until more and more of the population has been covered, has resulted in corresponding increases in the size of the Treasury Dept. That organization, numbering 28,000 employees in 1913, grew to 73,000 in 1921, then declined unevenly during the twenties and middle thirties. Its present total of 107,000 employees represents an increase of 115% over the 1934 figure of 50,000.

Despite the clamor that was raised about federal employment totals during the early years of the Roosevelt Administration, totals of those days are dwarfed by more recent experience.

• **Then Up in a Hurry**—There were 565,000 government employees in 1933. By 1936, the number had increased to

FEDERAL JOBS SET PEACETIME RECORD

Total, though less than war peak, still 130% greater than 1940



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HERE'S A BRIGHT FUTURE FOR PLASTICS

FLUORESCENT lighting and plastics were made for each other. They just had to get together.

See what plastics do for this fine fluorescent fixture by the F. W. Wakefield Brass Company. General Electric molds the reflectors and endcaps of urea plastics. Transmission and reflection characteristics were specified to produce cool, glare-free illumination that is as easy on the eyes as daylight.

And these plastics fluorescent accessories are precision parts with interchangeability for ready assembly into a continuous line of lighting units. Light in weight, strong, non-shattering—they reduce shipping costs. And they make the finished fixture safe and easy to keep clean.

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824,000. In 1939, just before the war broke out in Europe, the figure was 920,000. After that it really went up fast, jumping by about 800,000 a year from 1941 to 1943, when it hit the record total of 3,002,000.

The Office of Price Administration, with its pervasive controls over so many facets of the economy—much tighter controls than any imposed during the depression—didn't have more than 65,000 paid employees in 1945. It also listed about 125,000 unpaid employees, but it is safe to say that, if their services had had to be paid for, far fewer employees would have sufficed. This may be taken as an indication that, in the event of a future depression, while government jobholders would undoubtedly increase, the total number of federal employees required would still fall far short of the wartime peak. (Relief workers are not counted as government employees.)

• **More Women Dismissed**—The monthly changes in federal employment as it was declining in fiscal 1946 show that far more women than men were lopped off the rolls. While there is not available any survey of prospective job intentions, it is fair to assume, in view of what was happening in the over-all manpower picture during the same period, that most of the women who were fired retired from the labor force.

Should federal employment be cut

to 2,000,000 in the next few years or so, the total would still bulk very large in the American economy. Roughly, it would equal about 16% of the present number of production workers in factories. It comes to about 33% of the present number of retail store employees. Thus, the federal government, long since recognized as the largest single business in the United States, is now comparable, in its employer role, with some of the largest industrial groups.

AIRPORT BUS AT CITY FARE

A new express bus route from Chicago's loop to its municipal airport will enable air passengers so minded to save 78¢ on the eleven-mile trip. Operator of the service will be Chicago Surface Lines, local streetcar company.

C.S.L. says it has no intention of getting into the business of ground-transferring airline customers; that it is merely attempting to provide better service for 500,000 people living on the southwest side of the city.

Test runs of the express route have been made in 40 min. using new 44-passenger buses. Coaches stop only at intersecting bus or streetcar lines. Fare will be the standard 8¢ city rate. Parmelee Transportation Co. and Blue Bird Air Service, now serving passengers of the ten airlines entering Chicago, reduced fares in July from \$1.15 to 86¢.

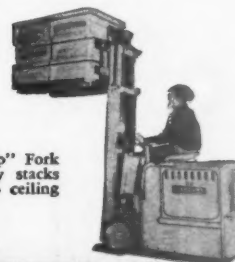
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Mercury "Jeep" Fork Truck quickly stacks pallet load to ceiling height.



TO KEEP DOBBIN ABREAST OF IMPROVEMENTS

Now even the horse has had its horsepower stepped up. So asserts Eli A. Kohler, Buffalo (N. Y.) stockman, who reports that his new type of harness (above) gives 35% more pulling power. Contending that conventional horse collars are inefficient, Kohler—for 50 years a South Africa farmer—has devised a steel plate neck "pad" with rotating hames (uprights on the collar) to keep the load distributed evenly against neck and shoulders. Double martingales and traces of maple strips from hames to bellyband maintain constant pull.



11,000 WILL DIE, \$600,000,000 WILL BE LOST BY THE END OF 1947! — this is no scare headline, but the grim truth as reported at the Eastern Fire Chiefs Convention June 25th.

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Sad Days for Silk

To triumph of synthetics is added a series of setbacks in efforts to revive exports from Japan to the United States.

Japan's all-important silk industry suffered grave wounds from the empire's military adventurers at a time when it was hard put to defend itself against synthetics. It isn't faring much better under the efforts of Gen. Douglas MacArthur's economists, who are struggling for maximum exports to the U. S. as a means of acquiring dollars and helping the conquered nation to regain its feet.

• **Luxury Demand**—Though rayon and nylon have gobbled all but a bare wish-bone of the former silk markets, there remains a luxury demand for the latter which created fantastic prices for the small postwar lots sold by the government. But the trade is protesting that Uncle Sam appears to be bent on squeezing the ultimate penny out of the present shortage without regard for the welfare of the domestic industry or the empty bellies of the Japanese.

"If a private company took such advantage of a scarcity," wail the critics,

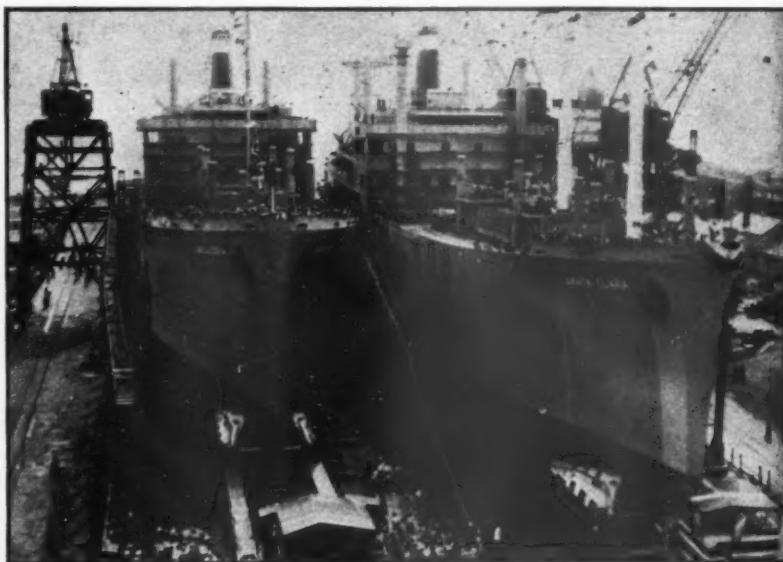
"Washington prosecutors would be on its neck in a jiffy."

• **Magagna's Charges**—An explosion felt in the farthest fringe of the industry was touched off on Aug. 25 by Peter Magagna, a Pennsylvania silk manufacturer and adviser to the Supreme Commander for the Allied Powers in Tokyo. Magagna demanded an investigation, charging that the handling of raw silk by the U. S. Commercial Co. (a purchasing subsidiary of the RFC) and the U. S. Testing Co. (a private grading organization) was "scandalous and nauseating," threatening the price structure of Japanese raw silk and textiles.

Magagna questioned the good faith of personnel. He asserted that the contract awarded the U. S. Testing Co. for grading 50,000 bales of silk was totally unnecessary, that the company had not cooperated with the Japanese, and that it sought a monopoly on raw silk testing at home.

• **Patterson Acts**—The Magagna outburst went to Secretary of War Patterson, who instructed Gen. MacArthur to make a thorough investigation of both the Japanese silk program and the irate Peter Magagna. Meanwhile, the U. S. Commercial Co., sole distributor of silk from Japan, was seeking means of quieting the storm raised by its sales of supplies to American processors.

After Pearl Harbor, the government



DOUBLEHEADER FOR THE TOURIST TRADE

With the twin launching of the S. S. Santa Sofia and the S. S. Santa Clara at U. S. Steel's Federal shipyard at Kearny, N. J., the Grace Line last week completed its postwar fleet of nine new vessels. One was launched earlier at Kearny, six at the Wilmington yard of the North Carolina Shipbuilding Co. (subsidiary of Newport News Shipbuilding & Dry Dock Co.). The new vessels displace 13,907 tons, will accommodate 52 passengers and 8,800 tons of freight. The three Kearny-built ships will be used on the line's Caribbean cruises, the other six on the run down South America's West Coast.



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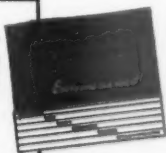
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MUCH as we would like to see you locate here, pleased as Alabamians would be at the employment the opening of a diamond mine in Alabama would give, that is a venture which we wouldn't recommend, even though there is a market in Alabama for diamonds. We wouldn't recommend it because, so far as is presently known, there are no diamond deposits in Alabama.

The case of the diamond mine in Alabama is, of course, an exaggeration but illustrates the point that we will not try to "sell" you Alabama as being ideal for any and all industries. It is an ideal location for some, a very satisfactory one for others and perhaps not suitable for a limited few.

Your inquiry will, after consultation, bring to you an impartial report from which you can determine whether or not there is in Alabama a location which meets your requirements.

Industrial Development
Department

**ALABAMA
POWER
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ALABAMA

bought in all raw silk in this country, mainly for parachutes. Some 3,000 bales (about 132 lb. each) were left over. These were sold last winter on a basis of 100 bales to the bidder. The government paid \$3.06 per lb. for the silk, sold it for about \$12.

• **Secret Bids**—The first raw silk from Japan was offered in early July. About 5,000 bales were sold under sealed bids. Prices averaged \$12.50 per lb. But this time subdued mutterings became an audible roar. The trade wanted an open auction with a price minimum instead of the uncertainty of secret bids. It wanted more substantial offerings and more accurate grading.

Undaunted, the government made its third offering early in August. It included 7,766 bales. This time the trade balked. Many refrained from bidding and the government withdrew the lot, with sales of only 2,260 bales, because bids were too low.

• **Questionnaires**—To obtain a guide to the trade's opinion of prices and needs, silk mills are answering questionnaires from the Dept. of Commerce, distributed at the request of MacArthur's headquarters. Users are asked to state the quantities and types that they could absorb in the coming year at each of three "assumed" price levels—\$3, \$6, and \$10 per lb.

Silk men were quick to note that the first figure is the prewar price, the second is the trade's idea of a top level, and the third is near to the prices obtained by the closed bids. Bet is that the \$3 price will get most votes as the level which would assure silk textiles real distribution. But some suggest that \$3 would not allow for Japan's increased labor cost and hence might give the industry a death blow.

• **Mostly to the U. S.**—Of the 130,000 bales which Japan has marked for export this year, 84% will come to the U. S. Since 50,000 bales arrived by July 15, it is obvious that Uncle Sam has quite a stock on hand and in prospect.

The Japanese peasant can make more yen by raising rice, wheat, and potatoes for the black market, so he has continued the uprooting of mulberry trees (on the leaves of which silk worms feed) to concentrate on food crops. That explains a reduction to an estimated 170,000 bales of production for 1947, compared to 723,000 bales in 1940. (In the old days, one Japanese out of four received all or part of his income from silk.) There is agitation in Japan for the export of silk textiles as a means of increasing employment.

• **A Long Cycle**—Outlook for silk has not been so doubtful in all the 45 centuries since the number-one wife of Emperor Huang-ti founded the industry in China and invented the loom on which the yarn was woven. Production methods became a trade secret. Social-



LET YOUR LIGHT SO SHINE—

Department store beauty salon heads, meeting in Chicago last week, were given an advance peek at the Cosmetron, a lamp-and-oil combination package to be marketed as a complexion corrective by Delettretz, Inc., subsidiary of Universal Laboratories, Inc. For a facial, pat on the oil, spend five to ten minutes under the infrared heat lamp designed by Sylvania Electric Products Co. The set will retail for \$6.50, plus luxury tax on the oil.

ites of old Rome paid weight for weight in gold for the shiny yard goods that came from China over the camel trails. In 300 A.D. the art was smuggled into Japan. Finally, improved Japanese techniques enabled the Mikado's businessmen to capture the market.

• **A Decisive Turn**—The war intensified the development of rayon and nylon at a time when silk was entirely shut out of the American market. With nylon production now in a state of feverish expansion, it becomes obvious that demand can be met within six months or more—which means that silk definitely is dislodged from its last stand, as the preferred material for women's hose.

The battle is already over so far as price is concerned. Even at the prewar price of \$3 per lb., silk is eliminated on a cost basis by rayon at 55¢ and nylon about \$2 per lb. On the retail front silk hose costing \$3.50 to \$5 per pair are up against nylons at \$1.25 to \$1.95.

• **All That's Left**—Only the luxury demand remains as a final prop to the silk market. Some women who "don't like the feel of nylon" against their skin will still buy silk stockings. Economic crystal gazers on MacArthur's staff figure the future world demand for Japanese silk will level off at 200,000 to 225,000 bales a year. This is less than a third of the country's 1940 capacity.

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Theodore Roosevelt on tour during the 1900 Presidential campaign



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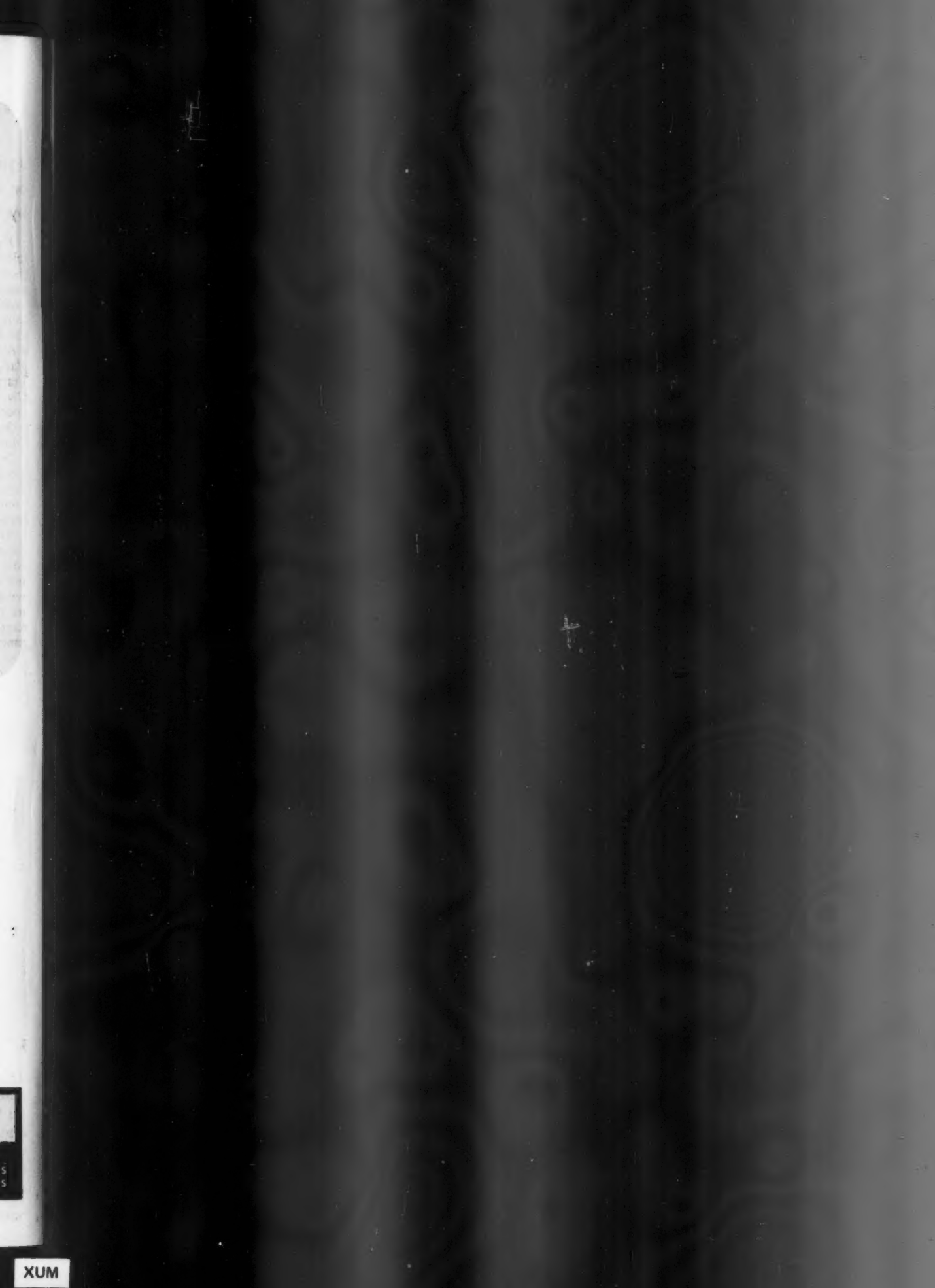
Colson designs and manufactures handling trucks for every purpose—from wielding heavy single units to transporting hundreds of small units in bulk loads. Write today for complete information on the labor-saving Colson line.



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No-Shows on Spot

Airlines begin campaign against patrons who don't use or cancel tickets. Plan O.K.'d by CAB, but it may backfire.

Part one of the airlines' double-barreled campaign against "no-shows" (booked passengers who don't use or cancel their reservations) got started last week, confusing the public and causing company executives to wonder whether the scheme will backfire.

• **Approved by CAB**—First part of the plan, filed for the lines by the Air Transport Assn. and approved by the Civil Aeronautics Board, authorizes operators to resell reservations not picked up and paid for within the time limit set at time of sale.

Second part, effective Oct. 15, on CAB's expected approval, will permit airlines to deduct a 25% service charge from refunds on tickets not canceled before scheduled time of departure.

The object of the crackdown on no-shows is to recover thousands of seats, now flown empty, for long waiting lists, and queued-up "go-shows" poised at every airport to leap at reservations that are canceled in time for a refill. If the remedy cures, it will push seat occupancy and revenue back up toward the over-90% under war priorities.

• **Notice Required**—Part one, sweated out by A.T.A.'s traffic committee and made effective by airlines Aug. 25, provides that if the passenger does not pick up and pay for ticket within time limit specified at time of sale, it is sub-

ject to resale and reservation is subject to cancellation.

The provisions also require the holder of a ticket bought in one city for trip beginning in another to contact the airline in the second city three hours before departure; to notify the ticket office three hours before departure after a stopover; to give three hours' notice on starting the return portion of a round trip.

The second, third, and fourth rules do not say specifically that reservations will be resold. That is because airline lawyers are not sure that customers, having paid for a service, can legally be put to such pains to insure its performance. (Colonial Airlines is sticking to its own no-show plan which requires a notice period of six hours.)

• **Passengers Complain**—The rules are not simple, and public response is uncertain. For one thing, in congested cities it is often difficult to get a phone connection with an airline office either to make or to cancel reservations. Further, some air travelers complain that many schedules are late and are just as "no-show" as the passengers.

CAB accepted the no-show plan in the public interest, and air travelers generally accept it in self-interest. But individuals who find themselves grounded by it are hopping mad, and they waste a lot of airline counter time trying to talk themselves back aboard.

RANGELY STOCK ATTACKED

The spectacular oil development at Rangely, Colo. (BW—Aug. 31 '46, p22), had its long-expected repercussions in the stock-selling field last week when the Securities & Exchange Commission



No gauges in Nature!

MAN's conquest of the powers hidden in Nature is due mostly to control. (Volcanoes and thunderstorms are symbols of uncontrolled pressure.)

Controlled pressure is a vital factor in transportation, utilities and most industries. When atomic energy finally is mastered for thousands of uses, all along the line of processes, pressure gauges will be employed.

No wonder then, that for nearly all the past hundred years—America's age of mechanical marvels—Ashcroft Gauges have served with enduring accuracy in many thousands of widely-differing installations.

They indicate, or indicate and record, pressures of air, gases, steam, water and other liquids.

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FOR MOBILE HEALTH PROTECTION

To provide greater flexibility for public health maintenance activities, War Assets Administration has offered for sale 40 slightly used Army mobile medical laboratories. Already 35 units have been sold to states at \$2,690, less 40% discount allowed public health agencies. The 2½-ton General Motors ten-wheel chassis and lab bodies cost \$5,474 originally. The units are equipped for testing milk, and water (for stream pollution investigation); for checking food handlers, and for other public health uses, such as venereal disease drives.

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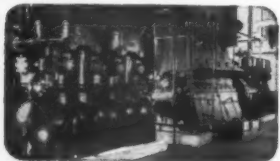
Three Large Frick Machines Serve
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filed a restraining action against Rangely Petroleum, Inc.

SEC asked the U. S. District Court for an order prohibiting the firm from selling its 5¢ par value stock by "misrepresentation and omissions." The company's leases, SEC charged, are five miles from the nearest production in the field and "are not on any geological structure favorable for accumulation of oil and gas."

Housing Speedup

Home construction is due for shot in arm. More materials put under priority, and OPA gets task of enforcing new rules.

Far-reaching moves that will result in the completion of veterans housing at a tremendous rate late in the fall have been taken by Housing Coordinator Wilson Wyatt, who is now taking over from the CPA practically all the controls on construction.

• **More Priorities**—Here are the developments that are expected not only to push Wyatt's program forward rapidly, but also to result in a great volume of nonresidential construction this year, with costs under greater control:

(1) Wyatt has won out in the fight with Administrator John Small of the CPA as to who should control construction, and through his power as housing expediter he has cut industrial construction approvals from \$48,000,000 weekly to \$35,000,000.

(2) Some 27 new building materials



Wilson Wyatt (right) takes time out from his duties as federal housing coordinator to explain to Joseph Meyerhoff, president of the National Assn. of Home Builders, the new regulations which have been adopted to boost the nation's home-building program, which has been lagging badly, nearer to its scheduled level.



HI, JIM! That was sure a swell piece of work you turned out today!" might be a greeting from the plant manager to a worker in one of the many friendly towns we serve with Electricity—where "the boss" and workers are frequently personal friends. The largest of these communities is of small-town character and, on the average, ninety-five per cent of their people are native-born white, of a most desirable type.

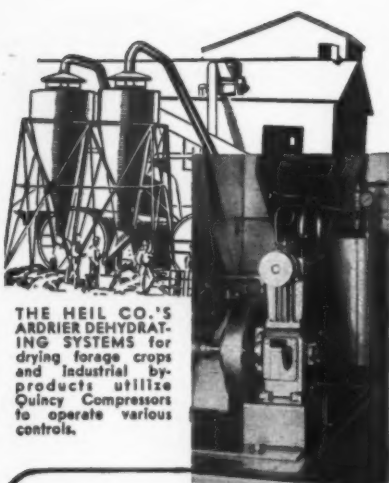
Locating a plant in these smaller towns, automatically assures the advantages of neighborly, home-loving workers, who do not have to commute and consequently have more time to spend with

their families. Greater personal interest in the business induces the corollary of stepped-up production, less rejects, less absenteeism. Too, there are untapped sources of labor supply, such as the rural worker.

The mental attitude of workers is something money alone won't buy. In these friendly Ohio towns, all factors conspire to produce a feeling of contentment, of being settled.

If labor is your problem, investigate this location. Our Industrial Agent knows all phases of these 555 communities thoroughly and can give you expert cooperation in selecting a site.

THE OHIO POWER CO., Industrial Dept., General Office, CANTON 2, OHIO



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Opportunities to use compressed air in controlling operations are many and varied. In the Ardrier Dehydrating System, compressed air is used to control temperature regulator, damper motor, feed gauge and automatic fuel valve. So, consider compressed air as an actuating medium for controls on your products. The compact modern design of Quincy Compressors makes them especially suitable for installing as an integral part of other equipment. Available in air and water cooled models ranging from 1' to 80 cu. ft. displacement and up to 500 lbs. pressure P.S.I. A Quincy compressed air specialist will be glad to help select the correct compressor to meet your requirements.

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NEW MODELS BUT NOT FOR HOME CONSUMPTION

To would-be buyers of new passenger automobiles, many of whom have had to be content with window-shopping, cars for export, like those at Weehawken, N. J. (above), have long been a sore point. Last week the refusal of Nash employees to work on foreign-bound autos again spotlighted this bone of contention. In defense, manufacturers claim they are within government export quotas—about 6% of output—that price ceilings in many countries discourage illegal sales. And with British producers exporting 50% of their passenger cars, U. S. makers are putting on steam to rebuild their foreign trade.

have been placed under priority distribution, which makes a total of 57 types of supplies. Almost everything a housing builder needs is now distributed by priority.

(3) Wyatt has ruled that at least 75% of the output of all 57 items, and in some cases 90% to 100%, must be set aside by producers and distributors for priority distribution.

(4) Wyatt has ordered that the use of the HH priority rating for housing work be intensified sufficiently to channel 95% of the set-asides into housing construction.

(5) Authority to force producers and distributors to abide by the new regulations pertaining to construction supplies has been transferred from the CPA to the Office of Price Administration. Since OPA will use its large staff in its 500 area rent offices on this work, while CPA assigned only a small staff to the task, the enforcement program is expected to put a real crimp in all diversions and black markets in the distribution of critical building supplies.

(6) Latest government reports show that the production of building supplies is shooting upward at a great rate. Lumber production is expected to reach the 32,000,000,000-b. ft. goal set for 1946; common brick output in June jumped 98% over June, 1945; clay sewer pipe production during the first six months of this year was 45% greater than for the same period last year; cement shipments in June were 62% above last year; and gypsum board and lath output in 1946 will reach an all-time an-

nual peak of nearly 3,000,000,000 sq. ft.

• **Substantial Volume**—All of these developments are expected to result in a tremendous increase in the actual completion of new housing, which has been held back frequently by the lack of one or two items. At the same time, a staggering volume of all types of construction is going forward.

The latest figures of the National Housing Agency reveal that between Jan. 15 of this year, when the housing program began, and July 31 a total of 194,200 permanent dwelling units were completed. This figure is significant when it is realized that in the best prewar year, 1925, 937,000 dwelling units were finished.

• **Well Above Estimates**—A joint schedule of residential and other construction worked out by the CPA, NHA, the Federal Works Agency, and the departments of Commerce and Labor at the same time Wyatt's new controls were being planned calls for a total volume of \$15,800,000,000 of construction this year and over \$19,000,000,000 next. These figures far exceed the most optimistic estimates made late last year.

Moreover, because so much industrial, highway, utility, and other non-residential construction got under way while no limitations were in force on building, residential construction is expected to account for less than \$5,000,000,000 of this year's total and for only a little over \$7,000,000,000 next year. But the total effect is that the building boom the construction industry has been talking about is well under way.

More Food for You in 1947

SO THAT you can enjoy more food, and food of finer quality, next year, International's 26 manufacturing plants are already at work producing large quantities of high grade plant foods.

These plant foods, made with Potash and Phosphate from International's mines, provide the essential minerals required to produce foods which are deliciously flavored and rich in nutritional values.

Farmers, still busy with the harvesting of this year's crops, are making plans now for their plant food requirements for 1947 crops. They are determining quantities they will need, grades for their particular crops and the methods of application which will produce the maximum yields.

To supply the farmer, year after year, with new and better plant foods and to

help him increase his skill in their use, International is continually carrying on research in its laboratories and in collaboration with Universities and Agricultural Experiment Stations. You see the results of this work in more and finer quality food.

International is building new mines and manufacturing plants and rapidly expanding its production of essential raw materials, for both domestic and export markets, to help make it possible for people throughout the world to enjoy more food of finer quality in 1947.

~ ~ ~

International Minerals & Chemical Corporation, General Offices: 20 North Wacker Drive, Chicago 6.



INTERNATIONAL MINERALS AND CHEMICALS serve you in many ways through industry and agriculture: POTASH and PHOSPHATE for industrial chemicals and fertilizers, HIGH-ANALYSIS PLANT FOODS for larger yields of quality crops, CHEMICALS: Potassium Chlorate, Silica Gel, Epsom Salt, Defluorinated Phosphate, Sodium Silico-Fluoride, Sulphuric Acid, AMINO PRODUCTS for the food and pharmaceutical industries; Mono Sodium Glutamate for finer tasting foods, Glutamic Acid, Glutamic Acid Hydrochloride, Betaine, Betaine Hydrochloride,



FLYING
IS
SAFER
IF

... your plane is equipped with Irvin *Chair Chutes*. For these new chutes give extra protection in flight... make flying definitely safer for executives and business men. An exclusive Irvin development, the *Chair Chute* incorporates these unusual features—

- 1 **SIMPLICITY**... You don't need special training to use the Irvin *Chair Chute*.
- 2 **COMFORT**... You never have to "wear" the *Chair Chute* or put it on... except in an emergency.
- 3 **CONVENIENCE**... You don't have to carry the *Chair Chute* around or store it... it is always in your plane... in the back of the chair... ready for instant use.
- 4 **SAFETY**... The *Chair Chute* can be buckled on in a jiffy in an emergency... and you are ready for any eventuality. Lives have already been saved with this new chute.

Irvin *Chair Chutes* are available...now...for every type of cabin plane...large or small. Many organizations and individuals are already installing Irvin *Chair Chutes* in company and personal planes. Write at once for full particulars about this new kind of protection for the planes you own or plan to buy.



FEEL SAFER...BE SAFER
with the new Irvin *Chair Chute*

The seats in this Ercoupe are fitted with Irvin *Chair Chutes*. The chairs have the same beauty and comfort as de luxe airplane seats...plus the "built-in" safety of an Irvin chute. *Chair Chutes* cost little...take little time to install.



**IRVING
AIR CHUTE CO., INC.**
1666 JEFFERSON AVENUE, BUFFALO 8, NEW YORK

OPA CHECKLIST

General Orders

A new, simplified method by which cotton textile manufacturers can figure monthly changes in ceiling prices based on the price change in raw cotton (uncontrolled) has been announced by OPA. Each month the agency will announce a cents-per-pound increase (or decrease) factor for textiles made with combed yarns, a similar figure for textiles made with carded yarns. Producers will compute their cents-per-yard ceiling-price changes by applying the pertinent factor to the cotton content of their products. The Sept. 1 increase factors are 2.73¢ a lb. for combed fabric, 2.34¢ a lb. for carded, an average of 2½%.

Candy manufacturers whose profit margins have been reduced by rising labor and material costs may raise ceiling prices on all products until the industry's prewar profit margin of 5% on net sales is attained (Supplementary Order 182).

Processors' ceilings on canned tomatoes have been increased 14¢ per dozen No. 2 cans, proportionate amounts on other can sizes (Amendment 4, Supplement 19, Food Products Regulation 1).

End of Retail Absorption

Dealers who buy copper in carload lots and resell it in smaller quantities may increase their prices in order to restore Mar. 31, 1946, percentage mark-ups (Amendment 8, Revised Price Schedule 15).

Wholesalers and retailers of radio tubes may pass on percentage-wise the full 20% increase in manufacturers' ceilings which was granted in May (Amendment 1, Order 619, R.M.P.R. 136).

Decontrol

A complete list of all items exempted or suspended from price control between June 15 and Aug. 20 has been prepared by the Commerce & Industry Assn. of New York, 233 Broadway, New York 7. The list supplements similar catalogs covering previous decontrol actions; the entire set can be obtained from the association for \$1.

The following items have been suspended from price control:

All types of rubber footwear (Amendment 46, Supplementary Order 129).

Polishes and wax finishes containing specified amounts of imported waxes (Amendment 45, Supplementary Order 129).

Sterling silver flatware—silver-plated flatware remains under ceilings (Amendment 50, Supplementary Order 126).

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New Frontiers for New Pioneers...

GIANT GRAND COULEE DAM is creating a new land of opportunity in the Columbia River Basin of Eastern Washington. Here are new frontiers which offer a bright promise for new prosperity for agriculture, business and industry.



THE BIGGEST IRRIGATION PROJECT in the Pacific Northwest soon will bring water from Grand Coulee reservoir to the dry Columbia River Basin. Irrigation will transform 1,000,000 acres into 17,000 fertile, productive farms. Here will be a new frontier, where new pioneers will enjoy agricultural stability assured by regulated water.

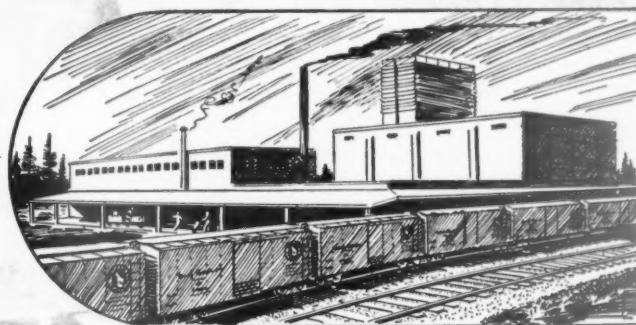
Ephrata and Quincy—midway between Spokane and Wenatchee, Washington—on the main line of Great Northern Railway, are twin capitals of the Columbia Basin project. These towns soon will be bustling with irrigation construction and other new enterprises.

New industries already are being located in this region to utilize the power from Grand Coulee and to be near markets made available by Great Northern's dependable service.

Agriculture, business and industry in this area will be favored by climate, soil, regulated water, ample low-cost power and excellent railway transportation.

Investigate these new opportunities. Begin now by requesting further information from

E. B. DUNCAN, Director
Department of Agricultural and Mineral Development
Dept. C-1, Great Northern Railway Company
St. Paul 1, Minnesota



MARKETING

Radio Firm Broadens Market

Stromberg-Carlson, after surveying crowded field and checking consumer preferences, puts new emphasis on low-priced models. Dealer organization is tripled for national volume.

For some time now the problem of how to maintain wartime sales volume, or something akin to it, in a peacetime market has been uppermost in the minds of most manufacturers.

Some resorted to diversification, some to making private brands (competitive with their own) for other distributors. Stromberg-Carlson Co. is one of those which elected to put its stake in broadening its market through a wider price range.

• **Market Analyzed**—This decision is based on realistic thinking and careful market analysis. The company's prewar sales were divided about equally between telephone equipment and radio receiving sets, with its third product, public address system equipment, a small though promising part.

Two of these divisions plainly had rosy postwar futures; radio's was less sure. Stromberg-Carlson executives looked over the field, counted at least 100 new manufacturing noses in it, estimated that the industry could turn out four times as many radios as before the war, and calculated its chances. It concluded (1) that national distribution—in contrast with its prewar, highly selective distribution in only 20 states—was necessary to reach its desired sales volume, and (2) that national distribution could not be obtained without a full line, since dealers, especially those in smaller cities, are reluctant to handle a brand confined to big-ticket models.

• **A Different Emphasis**—Superficially, the company's present line seems little different from prewar. It ranges from a table model at \$32.50 to a radio-phonograph console at \$750. Formerly, the lowest-priced table model was \$25 and the top-priced console, \$700. The difference is partly one of emphasis; the prewar low-priced models were included only because of dealer insistence and were never pushed; in fact, the company limited their distribution. Furthermore, where formerly there were only three table models between \$25 and \$35, with the next one jumping to \$150, the present line includes five table models ranging from \$32.50 to \$60, with the next highest at \$120.

The difference is also a matter of the times: Increased costs of postwar production make price tag comparisons

more significant than they appear due to the general upward march of prices.

• **Consumer Survey**—Stromberg-Carlson's new line is based largely on a consumer survey conducted by its advertising agency, McCann-Erickson, Inc., whose findings include:

(1) **Buying intentions:** 45% of the persons interviewed said they planned to buy a radio-phonograph combination; 27% expected to buy table models; 15%, radio consoles (this the company expects to see pared down, since in actual practice buyers paying the price of a console generally want a phonograph included); the remaining percentage had other ideas, such as chair-side models. The survey indicated that portables were likely to provide strenuous competition to table models as secondary home radios.

(2) **Prices:** 30% expected to pay more than \$150 for the model of their choice; 35% expected to pay \$75 to \$150; another 35%, less than \$75.

(3) **Brand preferences:** Although only 2% owned Stromberg sets, the brand was found to have built up, by past performance and current advertising, nearly 6% of the expressed preference. On this the company was considered to be likely to win 1/20 of the home radio market which was estimated at 11,000,000 sets in the immediate future.

• **Dealer Setup Tripled**—Once V-J Day had come and gone, the company let no grass grow under its feet putting this program into action. The dealer organization was expanded from 2,000 to 6,000—and these on a selective basis to give each one an adequate population segment, though dealerships are not exclusive. Department stores and electrical appliance stores tie for first place in the company's evaluation of its outlets; music and furniture stores follow. These and other types of retailers throughout the country are served by 55 distributors.

Stromberg-Carlson's reconversion to limited radio production required only one month, and the firm air-expressed its first sample postwar models to distributors on Sept. 12, 1945. Stromberg shipped console and radio-phonograph



CARRIAGE TRADE ITEMS FOR BARGAIN HUNTERS

Old customers of Filene's Automatic Bargain Basement, Boston, accustomed to finding anything and everything in this aggressive department which does one-third of the store's total sales, were not surprised this week when two mink coats were included in its 38th Anniversary Sale. Both were outlet items from an exclusive Miami Beach shop—one a \$5,000 size 18 at \$2,150, plus tax, the other a \$4,000 size 14 at \$1,950 and tax. They were not excepted from Filene tradition: a reduction of 25% if unsold after twelve days, given away after a month. Self-service is the rule in this department but special locks prevented the minks from being lifted from hangers in the saleslady's absence.

Here's Power FOR EVERYBODY

INTERNATIONAL Diesel Tractors

DAM THE TORRENTS! Save our farms and towns from floods. Conserve the soil that rides unbridled rivers. And get the dividend of waterpower—Power for Everybody!

This takes hard digging. That's where the earth-moving power of International Diesel Crawler Tractors saves heavy work and cuts construction costs. With unbeatable operating economy they save money. With high efficiency they convert low cost fuel into geared-to-the-ground power. And they keep on working day and night with little attention; digging, lifting, carrying and hauling, tirelessly.

Performance like that is what every construction boss wants—and International Diesels will continue to provide it!

Industrial Power Division

INTERNATIONAL HARVESTER COMPANY

180 North Michigan Avenue

Chicago 1, Illinois

Tune in —
"Harvest of Stars"
every Sunday
NBC Network. See
newspapers for time
and station.

International Diesel Tractors and Power Units excel in logging the forests; excavating for construction; building highways and airports; mining minerals, iron, and coal; drilling oil wells; pumping oil or water; operating electric generators, air compressors, mills of many kinds; building and maintaining railroads and powering ships.

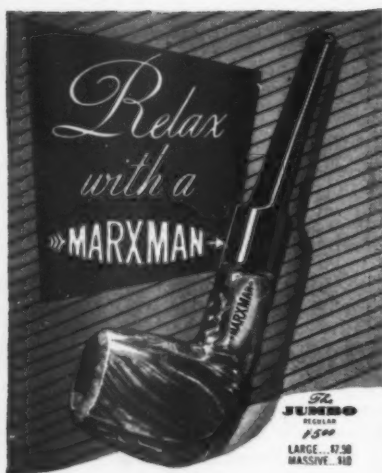
Other International Harvester Products...

INTERNATIONAL



Make Tractor... Refrigeration... Farm Power and Equipment

Industrial Power



Hand carved into individual shapes from rare, choice briars. Sweet, cool smoking, of course. Write for free booklet... shows how pipes are made, tells how to break in your pipe and introduces you to many other Marxman styles, \$3.50 to \$25.00.

Address Dept. 219



WITH the development of the new No. 5 MIKRO-ATOMIZER—a mechanical, screenless, compact and thoroughly tested mill—you can now investigate in your own pilot plant or laboratory the advantages of ultra-fine grinding in the 1 to 25 micron range. New product and marketing possibilities may be the result.

Engineered upon an entirely new grinding principle, and with capacities from 5 to 100 lbs. per hour, this new machine is ideally suited for sample test runs and small production grindings before assuming large scale schedules on larger sizes of MIKRO-ATOMIZERS.

Write for Confidential Test Grinding Data Sheet for a free test grind of your material.

PULVERIZING MACHINERY COMPANY
37 Chatham Road, Summit, N. J.
NOW... 2 TYPES TO MEET MOST PULVERIZING NEEDS

MIKRO-PULVERIZER
MIKRO-ATOMIZER
Reg. U.S. Pat. Off.

models last October, asserting that it was the only manufacturer that was making delivery on this type of merchandise in quantity to wholesalers and dealers before late December. FM (frequency modulation) receivers were shipped in April, 1946.

• **Aid to Production**—Though current shipments are "in quantity" only by comparison with much of the sorely hamstrung radio industry, the company stepped ahead chiefly because it makes many more of its component parts than do most of them, and because it has its own shops to make cabinets—a major shortage in the industry. Dealer quotas

are now based on sales potential, as well as past performance.

In the next couple of dollar-bright years, at least, Stromberg-Carlson will probably continue to do the bulk of its business in its upper-bracket models, along with the rest of the industry. Nevertheless its addition of low-priced sets is a revolutionary departure for this old-line company which has always held to top prices for top quality ever since it offered its first radio sets back in 1924 at \$900 and \$1,200—without tubes or speaker—high even in radio's infancy.

Insurance Shops

Liberty Mutual experiment with ground-level "stores" pays off in extra sales, may lead to big chain of similar outlets.



Liberty Mutual's Bennett Moore likes to take insurance to customers...

More than 18 months ago Liberty Mutual Insurance Co., Boston, opened an experimental "store" in Hempstead, Long Island, where potential purchasers of fire, accident, automobile, casualty or other policies could drop in for literature and answers to questions, but were subject to no sales talks (BW—Jan. 20 '45, p95).

The idea has proved so successful that the company has since opened four similar stores (in Evanston and Oak Park, Ill.; New Haven, Conn.; and Mt. Vernon, N. Y.), and will open a sixth, in White Plains, N. Y., this fall.

• **Proposed Chain**—The new offices are merely the vanguard in the company's



... in convenient, inviting retail stores like this Hempstead, Long Island, unit whose 1946 volume of new business may be 140% greater than 1945's.

TRANE ENGINEERS WANTED TO TEST HEATING IN SUMMER



... ANOTHER EXAMPLE OF THE INGENUITY OF THE MEN WHO CREATE *Weather Magic*

So that they could make actual comfort tests of new heating developments even on the hottest summer day, Trane Engineers literally put a living room into a refrigerator.

Constructed of concrete blocks and lined with highly effective foam glass insulation, this refrigerator is so large that a regulation sized living room, cushioned on rubber, fits into it perfectly. This room may be exposed to whatever weather the tests require—by Trane Weather Magic, of course.

With this refrigerator, Trane Engineers can determine exactly how a heating unit will perform under every conceivable condition of temperature, humidity, and even sound.

This "room in a refrigerator" is another example of the thoroughness of Trane Engineers who

carry out a constant program of research in the development and refinement of Trane Products and Systems.

All Trane Products are designed and built together for service together. The architect and engineer will find that there is a complete Trane System for almost every conceivable application in heating, cooling and air conditioning.

More than 200 Trane Field Engineers in principal cities all over the country co-operate with architects, engineers, and contractors in the application of Trane Weather Magic. National advertising is advising customers to seek counsel and Trane information from architect, engineer, and contractor.

The efficiency and flexibility of Trane Heating Coils make them ideally suited for every comfort and process application. One of a wide variety of types and sizes of Trane Heating Coils, the Type E coil shown can be used with low or high pressure steam or with hot water, and it can be used for cooling with chilled water.

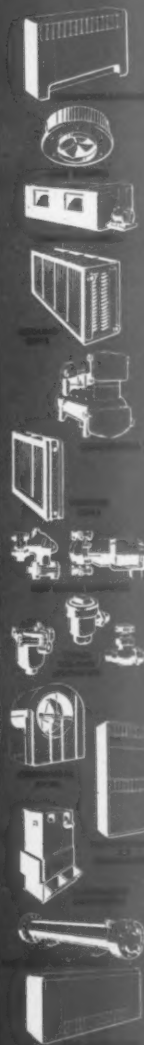
Used in conjunction with these coils, or in countless other air moving applications, Trane Centrifugal Fans are supplied in three types and a complete range of capacities. The fan shown is of the backward-curved non-overloading type. The Trane Fan line also includes forward-curved and utility fans.

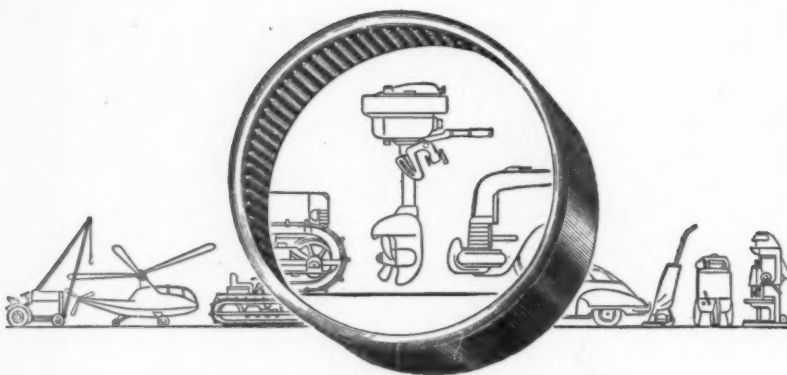
TRANE TYPE E HEATING COIL



TRANE BACKWARD CURVED
CENTRIFUGAL FAN

THE TRANE COMPANY
The House of Weather Magic
LA CROSSE • WISCONSIN
TRANE COMPANY OF CANADA, LTD., TORONTO
MANUFACTURING ENGINEERS OF HEATING AND AIR CONDITIONING EQUIPMENT





Here is another way to make your product stand out!

Yes, many diversified products stand out among their types—in terms of compact design, operating efficiency, maintenance economy and service life—through the use of Torrington Needle Bearings.

For these compact units allow *sturdier* construction with *simpler* housings...assure *maximum* efficiency of operation with *minimum* attention...pack a *higher* capacity into a *smaller* relative O.D....provide *valuable* anti-friction operation at *low* initial cost.

If your problem is one of making your product *stand out* with little change in design and minimum re-tooling, or securing the advantages of anti-friction operation with lower costs all along the line, write for our latest Needle Bearing Catalog No. 32. Our engineering department will welcome the privilege of working with you in the layout or application of any problem regarding the use of Needle Bearings in *your* product.

THE TORRINGTON COMPANY
TORRINGTON, CONN. SOUTH BEND 21, IND.

Offices in all Principal Cities

TORRINGTON NEEDLE BEARINGS

tentatively projected chain of 200 to 300 such outlets. They will follow the general banking trend toward small offices located where they can serve the public best. Some will be mere niches in the corners of large office buildings, others will be large units on the outskirts of population centers, where setback buildings are available for drive-ins.

Bennett Moore, Liberty's vice-president and director of public relations, for years had cherished the idea of treating insurance like food and clothing, which potential customers see from the street and step in to feel, taste, or try on for size. Moore saw no reason why this natural way of selling should not be tried on insurance, and felt that even if no one entered the stores, as ground-level displays they would be worth millions of dollars in direct advertising.

• **Silent Salesman**—Opening of additional stores will depend on fuller reports from the present ones, but the outlook is promising. Bringing the insurance business down from the upper stories of office buildings to ground-level retail stores with inviting window displays has so far doubled the company's sales in four of the experimental areas and substantially increased them in the fifth.

How this was done, and with fewer sales people, is plain from a study of the Hempstead unit. Its appearance is pleasing and immaculate. The walls are covered with murals depicting the protective value of insurance. A full-glass street front conveys the company's new policy of moving closer to the public. The whole store is one big window display, with a 70-ft. setback on which the company has emblazoned its motto of mutual enterprise with its policyholders.

• **Rising Sales**—Since its opening in January, 1945, the store has increased new business from the community by 109% from \$24,000 in 1944 to \$50,000 in 1945. At the present rate of sales, this year's business will reach \$120,000, 140% better than 1945.

The Hempstead office, with only twelve workers, handles twice as much business as the company's "out-of-sight" Broadway office in New York, manned by 24 workers. And although Hempstead is comparable in population to Providence, R. I., it does twice as much as the latter's old-type office. Its store manager, Stuart Hatchell, is now Liberty's top-flight salesman.

Liberty's retail venture is definitely aimed at new business, but it is also recognized as a convenient, economical method of servicing old policyholders. Company officials say their plan simply takes the mystery out of insurance and makes a dress-parade appeal to the public.

Bag Boomerang

Dress-print merchandising idea works so well for feed and flour companies that they can't meet housewives' demands.

Flour and feed manufacturers who years ago took to packaging their wares in cotton bags printed in plaids, floral patterns, or gay solid colors are finding this highly successful merchandising scheme something of a boomerang in these days of shortages.

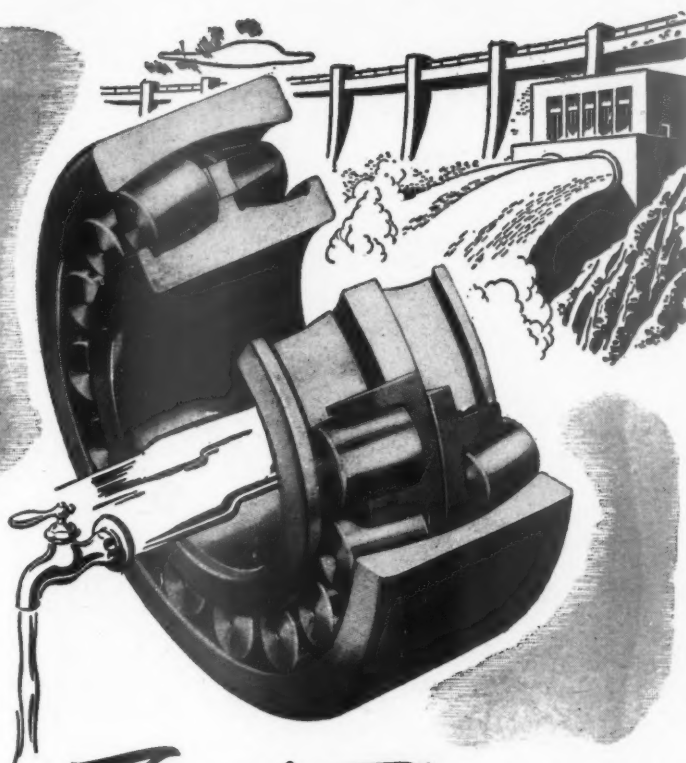
• **Housewives Like Them**—But while they may grumble about delayed deliveries on bags, caused by the extra process of converting (printing), and mourn that the chances of getting dress-print bags back into the industry for re-use are nil, they know they have little choice but to stick to dress-print bags if they want to retain their brand following among housewives.

The idea has been adopted by practically every manufacturer in the business, from such giants as General Mills, Inc., and Pillsbury Mills, Inc., on down the line to regional feed producers, and bag manufacturers have been obliged to provide dress-print bags or lose business. There's plenty of argument among millers as to which one originated the practice. It was first used about 20 years ago, but didn't take hold until a decade ago; about 1941 it swept the country. Percy Kent Bag Co. asserts that it was the originator, and the firm is acknowledged to be a leading supplier now.

• **Even Evening Gowns**—Undoubtedly the popularity of dress-print bags was influenced by the shortage of cotton yard goods. The cloth used in a bag



Fashioned of feed sacks, there's nothing corny about the chic bathing suit modeled by M-G-M's Beverly Tyler.



For the Thirsty IN 2000 A.D.

In expanding communities long-range plans call for the building of new reservoirs and pumping stations... modernizing and increasing the capacity of existing water-supply facilities... to accommodate estimated populations of the year 2000. Torrington Bearings help in this far-sighted program... providing long-term dependability and increased efficiency and economy of operation in sluice gates, pumping units... as well as in equipment needed for the construction and maintenance of such systems.

And in many types of heavy-duty machinery in the steel, oil, paper and construction industries, Torrington Bearings deliver the smooth, efficient performance needed to help maintain high production schedules. Built to handle extremely heavy loads over long periods of service, Torrington Bearings require a minimum of maintenance attention.

Torrington's Bantam Bearings Division has had many years of experience in the design and manufacture of bearings, large and small for special or routine applications. Our engineering staff will be glad to help you solve your friction problems.

THE TORRINGTON COMPANY
SOUTH BEND 21, INDIANA • TORRINGTON, CONN.
Offices in All Principal Cities

TORRINGTON BEARINGS
SPHERICAL ROLLER • STRAIGHT ROLLER
TAPERED ROLLER • NEEDLE • BALL

**THIS SHIPMENT
TRAVELED
981 MILES...**



*...but didn't
move an inch!*

WORKING CLOSELY with shippers, Erie loading specialists develop methods of loading and packaging commodities to make them stay firmly, safely, in position in fast-moving freight trains.

These Erie men analyze your packaging, blocking, bracing, and loading operations . . . make helpful suggestions which better protect

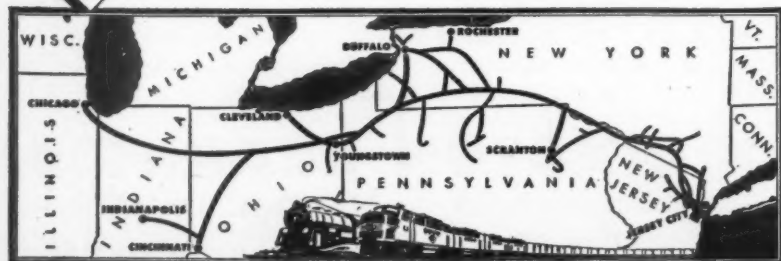
your products and often save you time and money.

Result: a load which can't shift, shake, or crush—which travels safely and undamaged to its destination.

Loading and packaging counsel is another progressive Erie service to bring even greater benefits to Erie shippers. This service is available to you through any Erie Representative.



Erie Railroad
SERVING THE HEART OF INDUSTRIAL AMERICA



New Peak in Income


Per capita income payments in 1945 reached the all-time high of \$1,150 the Dept. of Commerce announced recently. During the war per capita income in the agricultural states increased much more rapidly than in the country as a whole. But the top averages remain, as the table shows, in the eastern, central, and far western states, where the bulk of the population is, also.

	Per Capita Income—		
	1941	1945	% Increase
United States.....	\$693	\$1,150	65.9
New England.....	866	1,288	48.7
Connecticut.....	1,059	1,449	36.8
Maine.....	602	1,051	74.6
Massachusetts.....	883	1,321	49.6
New Hampshire.....	629	971	54.4
Rhode Island.....	900	1,268	40.9
Vermont.....	613	1,023	66.9
Middle East.....	873	1,370	56.9
Delaware.....	1,023	1,381	35.0
Dist. of Columbia.....	1,101	1,361	23.6
Maryland.....	851	1,212	42.4
New Jersey.....	912	1,373	50.5
New York.....	994	1,595	60.5
Pennsylvania.....	751	1,199	59.7
West Virginia.....	477	839	75.9
Southeast.....	404	761	88.4
Alabama.....	359	700	95.0
Arkansas.....	332	654	97.0
Florida.....	531	996	87.6
Georgia.....	389	745	91.5
Kentucky.....	369	735	99.2
Louisiana.....	433	785	96.3
Mississippi.....	283	556	96.5
North Carolina.....	397	732	84.4
South Carolina.....	354	663	87.3
Tennessee.....	413	813	96.9
Virginia.....	565	903	59.8
Southwest.....	477	906	89.9
Arizona.....	562	918	63.3
New Mexico.....	415	812	95.7
Oklahoma.....	417	889	113.2
Texas.....	497	917	84.5
Central.....	745	1,217	63.4
Illinois.....	865	1,360	57.2
Indiana.....	709	1,152	62.5
Iowa.....	609	1,109	82.1
Michigan.....	790	1,212	53.4
Minnesota.....	589	1,061	80.1
Missouri.....	621	1,063	71.2
Ohio.....	815	1,289	58.2
Wisconsin.....	649	1,161	78.9
Northwest.....	564	1,101	95.2
Colorado.....	620	1,100	77.4
Idaho.....	543	1,054	94.1
Kansas.....	549	1,113	102.7
Montana.....	682	1,172	71.8
Nebraska.....	510	1,117	119.0
North Dakota.....	534	1,123	110.3
South Dakota.....	484	1,083	123.8
Utah.....	592	1,023	72.8
Wyoming.....	696	1,096	57.5
Far West.....	925	1,443	56.0
California.....	974	1,480	52.0
Nevada.....	912	1,243	36.3
Oregon.....	752	1,266	68.3
Washington.....	833	1,407	68.9

is usually 39x46 in.—hence two or three bags provide enough material for a woman's dress, and dozens of garments, or articles for household use, can be made from a single sack.

Newspapers and magazines took up

Can You Answer These Questions About **CANCER?**

Q. Are we winning or losing the war  on cancer?

A. The news is good! The death rate from cancer of the stomach, skin, and mouth is going down. Among women the rate is being reduced for *all* forms of cancer.

Q. How is medical science  attacking cancer?

A. Doctors are treating more patients in the early stages of cancer when the chances of cure are greatest. Intensive studies are now being carried on to determine the causes of cancer and to develop new methods of diagnosis and treatment. These include research with hormones and experiments with radio-active substances and certain chemical compounds.

Q. What should *everyone* do about cancer? 

A. First, learn the *danger signals*. Second, when such warnings appear, *get medical advice immediately*, for there are only two ways of curing cancer: complete *removal* by surgery or complete *destruction* by X-rays or radium rays. It is estimated that 30 to 50 per cent of the deaths from cancer today might have been prevented by earlier recognition and prompt treatment.

Q. What are cancer's "danger signals"?

1. Any unusual lump or thickening, especially in the breast. 2. Any irregular or unexplained bleeding. 3. A sore that does not heal, particularly about the mouth, tongue, or lips. 4. Noticeable changes in a mole or wart. 5. Loss of appetite or continued unexplained indigestion. 6. Any persistent changes in normal habits of elimination.

Important note: These signals do *not necessarily* mean cancer. In fact, 88

out of 100 women who came to one cancer clinic proved *not* to have the disease. However, the signals do indicate that something is wrong which you should have checked by your physician. His examination will reassure you if cancer is not present, or, if it is, will permit prompt treatment.

To learn more about cancer, send for Metropolitan's free booklet, 106-S, "There Is Something YOU Can Do About Cancer."

TO VETERANS—IF YOU HAVE NATIONAL SERVICE LIFE INSURANCE—KEEP IT!

COPYRIGHT 1946—METROPOLITAN LIFE INSURANCE COMPANY

**Metropolitan Life
Insurance Company**
(A MUTUAL COMPANY)

Frederick H. Ecker, CHAIRMAN OF THE BOARD
Leroy A. Lincoln, PRESIDENT
1 MADISON AVE., NEW YORK 10, N. Y.

TO EMPLOYERS: Your employees will benefit from understanding these important facts about cancer. Metropolitan will gladly send you enlarged copies of this advertisement—suitable for use on your bulletin boards.

PLAIN TALK ABOUT PLASTICS

is this
your key
to a new idea?



For the first time in ages there's a new kind of piano key!

Made of Monsanto's Nitron, this new key offers a beautiful, rounded front edge, replacing the familiar lip. Pratt, Read & Co., Ivoryton, Conn., the manufacturers, say this about their new plastic key: It won't crack, split or yellow with age; it's easier to clean, it eliminates the necessity of matching keys, and it's applied in one piece instead of two or three.

Now you, no doubt, don't make piano keys... there are only a few manufacturers in the world. But you can take a cue from this "industry": there's hardly a product so old, so sacred, so traditional that it can't be improved by the proper application of plastics and plastics "know-how."

If you've been planning product changes or new products, bring your problem to Monsanto. With one of the broadest and most versatile families of plastics in the industry, Monsanto is in a particularly favorable position to help you. Your request will bring full data; simply address: MONSANTO CHEMICAL COMPANY, Plastics Division, Springfield 2, Massachusetts. In Canada, Monsanto Ltd., Montreal, Toronto, Vancouver.

Nitron: Reg. U. S. Pat. Off.



INSTITUTIONAL ADS FOR A U. S. INSTITUTION

To promote the "American way," two public advertising campaigns, entirely independent of each other, have been launched recently. In Milwaukee, Harry Scott, advertising executive, and Fred Nicholson, poster lithographer, have bought outdoor advertising space (right) with their own funds to put over the credo: "Keep U. S. Free. . . . Protect Your Right to Get Rich." And the Dayton (Ohio) Power & Light Co. has adopted the familiar divided-shield road marker (left) to point out in its national newspaper and magazine ads that "the right road" is "the American way."

the trend, printing pictures of potholders, curtains, pillow covers, pinafores—in fact everything up to and including evening gowns—made from sacks. The idea still makes good copy—frequently. Currently the National Cotton Council of America is engaged in an extensive campaign directed toward mothers and teachers, and it has a sample family wardrobe made from sacks available on loan for community programs.

In one Missouri county farm women have organized a "Sack and Snack Club" where they swap sacks until each acquires enough of one pattern to make a desired item. In an exclusive California food market, laundered printed flour sacks sell like hot cakes to wealthy customers reputedly including movie stars, writers, and directors.

• **Buying by Pattern**—Millers admit that women frequently buy flour, and at least influence their husband's choice of farm feeds, not by the quality of the product but by the pattern of the bag. Last year something like 100,000,000 dress-print bags were delivered by bag manufacturers, but even this didn't meet the demand. A Dept. of Agriculture official estimates that this year, out of the 55% set-aside of Class A and B cotton sheetings and osnaburgs allotted for flour and feed bags, 15% to 20% will be dress-printed, compared with perhaps one-seventh as much before the war.

When dress-print bags were first of-

fered, feed manufacturers were afraid of sacrificing their brand identity to a besprigged pattern. Flour sacks had for years been used for less glamorous household uses, of course, notably for dish towels, and even for garments; wisecracks used to snicker that "when the wind blows across the plains you can see flour brand names on all the little girls' underpants."

• **Saving the Brand**—Now, however, brand printings have been made as removable as possible, and new processes have been developed to solve the problem of brand display, without diminishing the sack's re-use value. Newest of these is the "band-label," by which a leading bag manufacturer laminates a brand-printed, 10-in. strip of paper to the cloth with water-soluble paste, so that it encircles the completed bag after it is sewn, but can be removed easily.

ABC GETS CROSBY SHOW

American Broadcasting Co., Inc., last week jubilantly announced that its 211-station network, plus more than 400 other radio stations, will be the one to carry the new Bing Crosby show sponsored by Philco Corp. The program will be transcribed, on Crosby's insistence (BW—Aug. 31 '46, p40).

Only other network applicant for Crosby's platters was Mutual Broadcasting System, since both NBC and CBS ban transcriptions.

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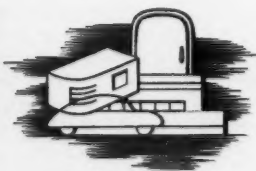
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Special Delivery

for Better Living



To bring you the many things you have been dreaming about—a new automobile, a new refrigerator, a better radio, or materials for a modern home—often in-

volves a railroad shipment of a thousand miles or more.

Today, there's a new Baldwin 3000-hp. locomotive that can help do this job faster . . . a Diesel-Electric Locomotive that packs more power under its cab than any other diesel unit in the world. It handles freight at passenger train speeds, gets perishable foods to market sooner, greatly increases the amount of cargo that equipment can handle in a given time.

Besides producing "Firsts" in new types of locomotives, Baldwin engineering is blazing new trails in the fields of hydraulic presses, testing machines, diesel engines, ship propellers, and quality castings and forgings.

The Baldwin Locomotive Works, Philadelphia 42, Pa., U.S.A. Eddystone Division; Standard Steel Works Division; The Whitcomb Locomotive Co.; The Pelton Water Wheel Co.; Baldwin Locomotive Works of Canada, Ltd.; The Midvale Co.



BALDWIN



GOODYEAR INDUSTRIAL RUBBER PRODUCTS



-Specified

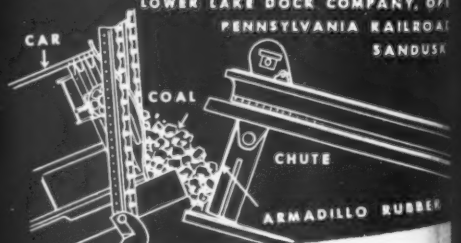
ARMADILLO RUBBER LINING

for GIFFORD RETAIL

LOWER LAKE DOCK COMPANY, OPERATING

PENNSYLVANIA RAILROAD

SANDUSKY, OHIO



FOR HOSE, BELTING, MOLDED TO THE WORLD'S HIGHEST STANDARD OF GOODYEAR INDUSTRIAL RUBBER PRODUCTS



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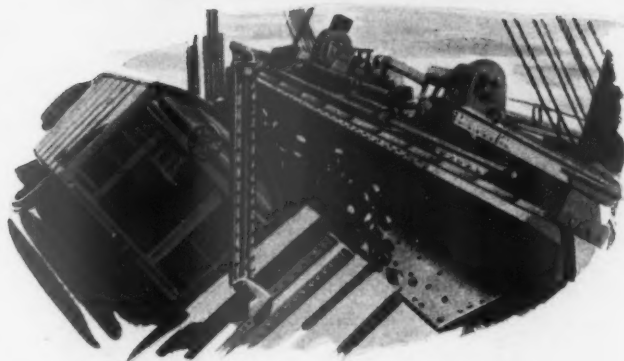
RC 33

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XUM

The rubber "glove" that catches 100 tons a minute!



ONE of the most unusual problems ever presented to the G.T.M. — Goodyear Technical Man — was the case of the giant coal loader pictured here. It was designed to pick up a 100-ton car of coal and pour it into a collier within 60 seconds, but as loadings peaked up to six million tons and more per season, an unforeseen complication developed.

You see, at this speed of operation the 100-ton loads cascaded down the loading chute into the hold of the ships with avalanche momentum. To protect both the coal and the ships from these smashing impacts, a retarder or swinging gate of heavy steel was installed in the chute, to check the rush of coal and control its flow. It worked — except the continuous impact and abrasion quickly wore out the heaviest steel!

Other methods of protecting the retarder were tried, but none lasted more than *three months*. Then the operators, the Lower Lake Dock Company of Sandusky, Ohio, sent for the G.T.M. After careful study of the forces involved, he recommended fitting the retarder with a heavy "glove" of Armadillo Chute Lining —

made from a super-tough rubber compounded by Goodyear for handling the most abrasive ores met in mining operations.

Lasts 34 times longer!

That was back in 1939. One year went by, then two, before a single section, at the point of greatest impact, required replacement — after "catching" more than 12 million tons of coal, after giving 34 times longer service than any other form of protection. And some of the original installation is still in service today! Not only has Armadillo Lining saved the retarder from destructive wear, but the operators report it has aided materially in protecting coal from breakage.

Armadillo Chute Lining is just one of many special-purpose rubbers developed by Goodyear for meeting extraordinary problems in abrasion and corrosion. It is as outstanding in these uses as you have found all Goodyear belts, hose, molded goods and packing. To consult the G.T.M. on your special-materials' handling problem, write Goodyear, Akron 16, Ohio or Los Angeles 54, California.

Armadillo—T. M. The Goodyear Tire & Rubber Company

GOOD YEAR

THE GREATEST NAME IN RUBBER

PACKING built
alone your nearest
dealer.



OXYGEN TO BREATHE is the most important thing in the world to one who is ill and unable to get enough for life from the air alone.

The use of oxygen in medical practice has grown rapidly in recent years. Physicians have found it effective in the treatment of certain types of heart disease, shock due to wounds or injuries, following major operations, and for numerous other illnesses.

The need for extra oxygen is so frequent in hospitals that many of them, instead of depending on cylinders of oxygen brought to the bedside, now have convenient oxygen outlets in many rooms and wards. Oxygen is brought directly to the bedside through an unseen "pipeline" from a centrally located "bank" of oxygen cylinders.

Oxygen is a principal product of Units of UNION CARBIDE. It is supplied to hospitals—and in much greater amounts to industry for numerous mass-production operations—largely through The Linde Air Products Company.

Linde Oxygen is now so readily available that no one need ever be without oxygen for any purpose. Oxygen is but one of the many basic and essential products from UCC—materials which, all together, require continuing research and engineering work with over a third of the earth's known elements.

FREE: Physicians, nurses, teachers, and others who would like more information on the availability of oxygen, and on the various types of oxygen therapy equipment, are invited to write for a copy of the "OXYGEN THERAPY HANDBOOK." Ask for Booklet 1-9.

UNION CARBIDE AND CARBON CORPORATION

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Products of Divisions and Units include—

ALLOYS AND METALS • CHEMICALS • PLASTICS
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PRODUCTION

Press Relocation Simplified

Unorthodox construction of Fisher Body plant permits suspension of stamping machines, cutting removal time from weeks to hours. Press stability retained by dropping center of gravity.

An important advance in building technology for a big stamping plant is being carried out by General Motors Corp. in its new body parts factory at Hamilton, Ohio, now under construction for the Fisher Body Division. The huge presses which will fill a large share of the building will be almost as easy to move as the desks in the front offices.

• **Hanging Presses**—The traditional method of installing presses for auto making or other operations requiring

big, heavy machinery has been to pour thick concrete piers many feet into the ground and then set the machinery on or in this base. Transfer generally required pneumatic hammer and pickax work, or dynamite, and then the construction of a complete pier for the new location.

Fisher engineers believe that at Hamilton they have eliminated all the usual problems of stamping plant changeovers. Their method is to hang the

Electricity Shoots Plane Into Flight

An airplane catapult employing a linear electric motor to accelerate planes to flying speed in a few hundred feet has been developed by Westinghouse Electric Corp. for the Navy.

Holding enticing possibilities for commercial as well as military aviation, the "Electropult" in recent demonstrations launched a jet-propelled fighter at 116 m.p.h. in 4.1 seconds after a run of only 340 ft. Without assistance the plane would have required a 2,000-ft. run to take off.

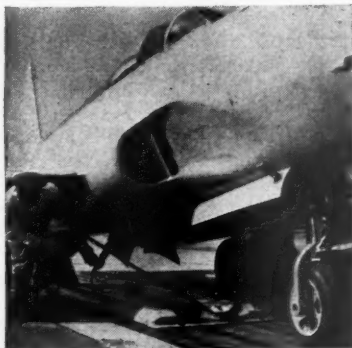
• **Shuttle Car Used**—Essentially an electric motor which delivers its power in a straight line rather than in a rotating pattern, the Electropult consists of a track (corresponding to the rotor in a motor) installed flush with the runway, and a shuttle car in which are installed the coils and steel

cores normally found in the stationary part of a motor. Extending only 5 in. above the track, the shuttle car is 11½ ft. long by 3½ ft. wide, runs on rails sunk into the ground on either side of the track (illustration, below).

A steel cable bridle harnesses the plane to the shuttle car. The center of the bridle passes around a lug on the car; the looped ends are hooked over projections on the under side of the plane. When flying speed is reached, the car stops abruptly, the bridle falls free, and the plane takes to the air.

• **Big Steel Flywheel**—A tremendous surge of power—12,000 kw. in a few seconds—is required to launch a plane with the linear motor. To obtain this power, the Electropult utilizes its own power source. A 1,100-hp. aircraft engine drives a direct current generator hooked to a d.c. motor. This in turn drives an a.c. generator connected to a 24-ton steel flywheel. The flywheel is worked up to a speed of 1,300 r.p.m. at takeoff, the direct current components are cut out, and the spinning flywheel drives the a.c. generator for the few seconds the shuttle car is accelerating the plane to flying speed.

Acceleration is not so fast but that it could be applied to commercial air transport, it is claimed. The device therefore might help make smaller airports or even floating seadromes practicable.



WHAT IS *YOUR* BUSINESS "BLIND SPOT"



Business activity is running at flood-tide! Authorities say the greatest era of expansion ever known is just ahead. Right now—today—there are more top-flight positions than there are men capable of filling them.

And here's the reason why: Responsible, high-salaried jobs demand men who are familiar with the whole structure of business—Accounting, Finance, Production and Marketing. Men with "blind spots"—those whose knowledge is limited to one or two departments—are severely handicapped.

Since 1909, the Alexander Hamilton Institute has enabled more than 430,000 men to overcome their deficiencies in essential business knowledge.

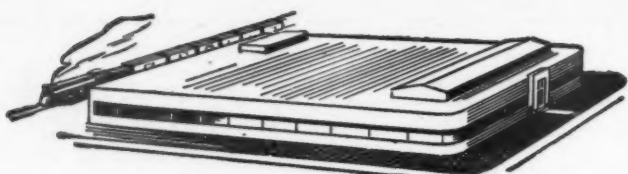
The Institute's program of executive training is described in the fast-reading pages of "Forging Ahead in Business." You may have a copy of this stimulating 64-page booklet, free and without obligation, simply by returning the coupon below. But please do not send for the booklet unless you are genuinely interested in self-improvement. Its appeal is limited to men who are looking ahead and who seriously intend to move ahead. For men of that type, "Forging Ahead in Business" has an inspiring and informative message.



ALEXANDER HAMILTON INSTITUTE

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Please mail me, without cost, a copy of the 64-page book
—"FORGING AHEAD IN BUSINESS."

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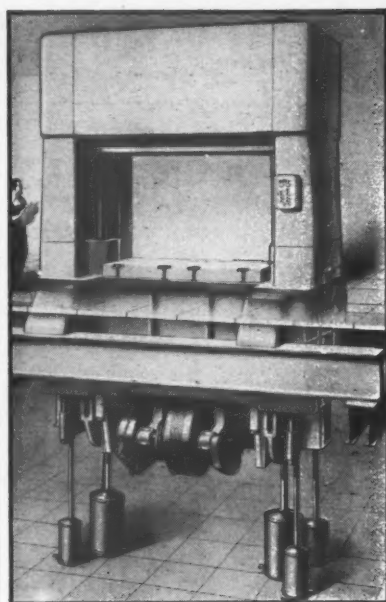


PLANT the Future in GEORGIA

Moderate size manufacturers employing up to 100 workers will find an ideal combination of industrial advantages in the small towns of Georgia. Here friendly, native-born people make up a reservoir of intelligent, adaptable, easily trained workers. These Georgians believe in fair play. They believe that an honest day's pay deserves an honest day's work.

A feeling of mutual trust and mutual respect exists between workers and management. In the small towns of Georgia you will find plenty of elbow room, plenty of sunlight, a year-round mild climate which contributes to lower construction and production costs. For many types of industry, raw materials are close at hand. There is plenty of good soft water . . . dependable electric power at low rates . . . excellent transportation to rich and growing markets. Georgia is a good place to work and a good place to live. Georgia has a sound tax structure—a well balanced educational system—a fine highway system and recreational facilities from the mountains to the seashore.

Our staff of industrial engineers has assembled accurate data on favorable industrial sites in the small towns of Georgia which are especially attractive to moderate size plants. Write Industrial Development Division, **GEORGIA POWER COMPANY**
Atlanta, Georgia



Huge stamping presses that can be moved from one location to another within the plant in hours instead of weeks are being installed in General Motors' new Fisher Body factory at Hamilton, Ohio. Instead of being firmly anchored in concrete, the presses rest on a network of steel girders, can be lifted off by an overhead crane.

presses between steel rails jutting up from the floor. From these rails, the machines will be lifted by overhead cranes in the same way that derricks hoist railway cars off their tracks.

• **Experiments**—Fisher engineers were not moving blindly in a new field. Their Grand Rapids stamping plant, built before the war, was a laboratory for some of the principles being carried out in full at Hamilton. After the Grand Rapids design proved its worth, one Chrysler Corp. plant used a similar installation. But the Hamilton plant is said to be the first complete embodiment of the new principles.

The press pit at Hamilton is probably the largest in the world—800 ft. long, 160 ft. wide, 20 ft. deep. The entire space is being honeycombed with girders resting on reinforced concrete columns which in turn are built up from a 36-in. concrete floor.

• **Latticework**—The columns are located 13 ft. 4 in. apart. The 2-ft. wide girders on them leave approximately 12 ft. of open area between columns. The long girders will in turn support other girders laid on them at right angles, each pair as far apart as the width of the press they will support.

When the installations are complete, the crosswise girders will be laid in place and the presses brought to them by

overhead crane. After the machines are in place, 4-ft. sections of pecan wood flooring will be laid.

Removal or shifting of a press can be accomplished by lifting the flooring and moving the press by crane. Customary weeks of press removal work will thus be reduced to a few hours.

• **Redesign**—New presses required for the unorthodox installation involve numerous changes from tradition—the first time in 30 years, say some mechanical engineers, that significant departures in design have been made in this type of machinery.

Gearing has been moved from the top of the presses to the bottom, so it will lie underneath the floor. Air tanks and other supplemental equipment have also been lowered. The lowered center of gravity allows the machines to rest on their girder bases and still retain essential stability. Practically all presses above 100-ton capacity to be installed at Hamilton will be built along these new lines.

• **Carrier to Carrier**—To make it possible for the machines to rest on the girder channels, supports had to be provided on the sides of the press frames. The new machines will have projecting elbows near the base. In some cases the elbows are welded onto the frames, in others they are fastened mechanically.

The presses will be laid out in lines running crosswise through the building. At one side the raw material, steel sheets, will be fed into the plant from railway cars or truck transports. The sheets will be processed as they travel across the press rows, finally reaching the welding department on the opposite side. Work will continue in straight line through the welding installation into waiting railway cars or highway carriers.

CENTRIFUGAL CAST LENS

Centrifugal casting is used in production of cylindrical drum lenses for ship lights at the Genthe glass factory in Goslar, Germany. Spinning the mold results in centrifugal action which causes the glass to climb up the sides and to fill in the prismatic cutting on the mold. At the same time, the inner surface of the lens is formed without taper and with a high fire polish. The same process is used for making the central portions of built-up lenses.

The glass for the lenses is ladled at 1,350 C. A small iron ladle, hemispherical in shape, is used.

After the glass has been poured it is sheared, and then the mold is rotated at a gradually increasing rate of speed. The maximum speed of rotation depends on the size molding to be made. Complete data are available in Dept. of Commerce report PB-23812.

MEMORANDUM

TO MANAGEMENT



Now that our loan to Britain has been signed, sealed (and in part delivered), at least one of Business Week's many foreign correspondents is going to have a busy, busy future.



He is Dr. Howard Whidden of Business Week's London bureau, slow-spoken Canadian-born son of a university president. At Harvard, he received his degree in economics with a Fellowship to the London School of Economics.



Like Frank E. Frank, Prague correspondent, Whidden was also with the Foreign Policy Association of New York during the war. He was in fact, the first economics writer and analyst with the Association.

Known by the State Department as an economic authority, he has become one of the foremost specialists on matters of British Empire trade. With the loan to Britain granted, and the proposed spending of over one billion dollars for American made goods in 1947, Whidden's business-news reports are more than ever of value to American management-men.

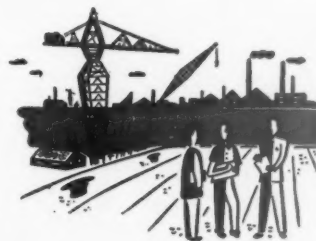
Readers of the International Outlook will in all probability recall Whidden's detailed report early in August, on the specific items of American merchandise to be purchased by Britain. Typical of

Whidden's reporting, his Business Week report on that subject was the first published, and was at once picked up by the news-services and widely reprinted by newspapers and financial journals across the country.

It was over a luncheon table that Dr. Whidden made the remark that possibly explains why he was attracted to the post of London bureau-head in the growing network of McGraw-Hill foreign business-news bureaus. "To an economist, or to business-men generally," said Whidden, "a study of Britain's critical fight to regain her position in world trade during the next ten years, is going to be intensely interesting and of prime importance."

In any event, when late in Spring of 1945, Foreign Editor John Chapman presented him with the opportunity to head-up the London bureau, Whidden reached for Chapman's phone, called his wife, and told her to pack. And now, the nearest Whidden ever gets to his favorite sport of 'shooting the rapids' in Canada, is punting on the Thames.

In gathering the material for his pre-views of business-goods demands from England, not the least of Whidden's assets is his acceptance by British industrialists as an economist who has studied Britain's problems.



Readers who are planning manufacture for export, can count on Whidden's columns for first news from Britain.

Paul Montgomery
PUBLISHER

No. 6

HEAVY LIFTING, MOVING, MATERIALS-HANDLING calls for the efficiency of WHITING CRANES

• For nearly 60 years, Whiting engineers have been finding the right answers to industry's materials-handling problems. By their complete analyses of individual plant requirements... and studied equipment recommendations... hundreds of America's leading industries move materials in shorter time, with lower operating costs, and with much manpower freed for other more efficient employment.

In order that the materials-handling equipment needed for maximum production will be ready to operate as soon as it is needed, we suggest the advisability of getting in touch immediately with Whiting Corporation, 15661 Lathrop Ave., Harvey, Ill.



Offices in Chicago, Cincinnati, Detroit, Los Angeles, New York, Philadelphia, Pittsburgh, St. Louis, San Francisco, and Washington, D. C. Agents in other principal cities. Canadian Subsidiary: Whiting Corporation (Canada) Ltd., Toronto, Ontario. Export Dept.: 30 Church St., New York 7, N. Y.

Dependable · Quiet-Running · Durable
WHITING
Overhead **CRANES**
Traveling

New Rail Turbines

Coal-burning gas units to be built by Allis-Chalmers and Elliott may open wide field of stationary power applications.

Two old-line turbine builders have entered the first heat of what may become a long-term competition for lucrative business in gas turbines for stationary power use as well as for ship and locomotive drives.

Contracts, let last week to Allis-Chalmers Mfg. Co. of Milwaukee and the Elliott Co. of Jeannette, Pa., call for one experimental power plant from each for America's first gas-turbine locomotives (BW—Aug. 3 '46, p44).

• Purchaser—Buyer of the new and distinctly experimental power units is the Locomotive Development Committee of Bituminous Coal Research, Inc. (BW—Mar. 9 '46, p63). The chassis for the locomotives will be bought later, with American Locomotive, Baldwin, and Lima cooperating with L.D.C. in their development.

Both locomotives are to be used in research to develop a gas turbine that will burn coal. By the time the turbines



HIGH AND DRY CHILL

To keep its "flying refrigerator" frigid, Santa Fe Skyways, Inc., uses a novel 300-lb. cooling system. Dry ice is placed (above) in a tank of alcohol which drops to about -110 F, is pumped into coils through which air is blown. Temperatures in the craft—a surplus C-47—can be regulated from 70 F to 32 F. The airline is an affiliate of Atchison, Topeka & Santa Fe Ry. (BW—May 11 '46, p35).

are delivered—next year at the earliest—coal-burning furnace experiments at American Locomotive's Dunkirk (N. Y.) plant will be well along.

• **Long-Range Aspect**—But the real prize for the turbine builders lies beyond this immediate locomotive application. (There is, however, plenty of incentive for the railroads to get gas turbines to work in locomotives, because the unit offers advantages in reduced roundhouse time, adaptability to low-grade coal, and higher horsepower per cab.) If it can be shown that gas turbines can be powered with coal, stationary power interests will want them—and in large sizes.

Another angle that has top research men burning the midnight oil is that gas turbines are probably the simplest, least costly, and most obvious prime mover for use of atomic power. It is very possible that this fact will be "discovered" shortly.

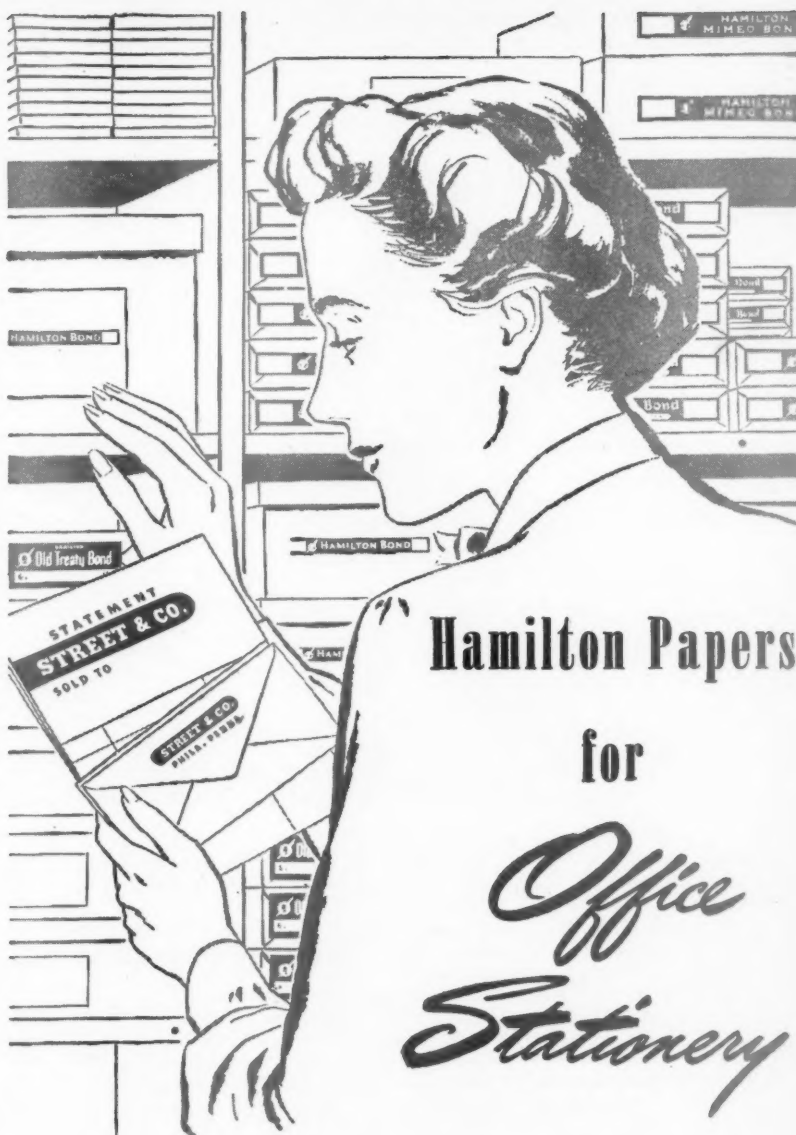
• **Elliott Unit**—The Elliott Co. induced the Locomotive Development Committee to order a centrifugal type compressor, which is basically the same as the Whittle jet-propulsion engine used in aircraft, instead of the big rotary machine the company is now building for the Maritime Commission's converted Liberty collier. The locomotive's 3,710 hp. exceeds the ship's 3,300 hp. and also beats, in a single cab, any existing diesel unit.

When it finally reaches the rails, the Elliott unit will carry its complete supply of coal, of the same grade and size used in steam locomotives, but within the cab, dispensing with the usual tender. No water will have to be picked up or carried. This feature, builders assert, will afford railroad operators more horsepower in a shorter cab than in any diesel unit of comparative size.

• **Allis Unit**—The Allis machine will be built with an axial flow compressor resembling in some respects the 26 successful Houdry catalytic-cracking outfits which Allis-Chalmers has made, and of the same type as the 1,350-deg. experimental unit that the company built for the Navy (BW—Apr. 13 '46, p54). With 3,750 hp. in a single cab, Allis can squeeze out a few more miles to the pound of coal than Elliott. Both can do a lot better than the present iron horses, although neither unit crowds the diesels on an efficiency basis.

It can be assumed that neither Allis nor Elliott expects to stop with this locomotive application, as gas turbines are so adaptable that they can be made light enough for plane use, and rugged enough for ship and land generator use.

• **Looking Ahead**—American development of power units lagged somewhat during the war because of concentration on aviation and maritime applications, but it now shows signs of com-



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HAMILTON PAPERS



**THE PIONEER
VIRTUES STILL
LIVE IN...**



THE NEW FRONTIER

Our forefathers, united in the common task of carving America from a wilderness, had few tools with which to work. A mutual interest, cooperation and the will to do an honest day's work were the pioneer virtues which helped them overcome mighty obstacles. Industries, realizing the need for such virtues today, will find that the pioneer spirit still lives in Mississippi. The people of Mississippi today are investing their money to build plants for industries under the BAWI plan. They have a common interest in the industrial expansion of their state. To them, industrial employment is not just a job — it's a future — a future they're willing to work for.

The trail blazed by the pioneer through Mississippi in years gone by is still evident throughout much of the state. Why not get away for a while and relive the exciting history of this charming Deep South state? You'll find it exhilarating and restful.



Ask for a confidential report on Mississippi's industrial opportunities.

MISSISSIPPI AGRICULTURAL AND INDUSTRIAL BOARD
New Capitol Building
JACKSON, MISSISSIPPI

(BAWI Means "Balance Agriculture With Industry")



MISSISSIPPI
★ THE BAWI STATE ★

ing up with a rush in the next year or two. It is significant that both General Electric and Westinghouse have power units under study in their inner sanctums which could be used for locomotives and other applications.

This country still has a long way to go to catch up with the Swiss, who have a 4,000-hp. locomotive unit on test, a 9,000-hp. ship drive under construction, and a 27,000-kw. power plant on their drawing boards intended for winter use when ice jams up their river hydroelectric units.

Plastics Step-Up

Monsanto's big expansion, including new Texas plant, will give company 80 million pound production rate by 1947.

Another step in the projected expansion of the plastics industry (BW—Apr. 27'46, p21) is Monsanto Chemical Co.'s announcement that it will install a major styrene plant at Texas City, Tex., adjoining the 50,000-ton styrene monomer plant which Monsanto built and operated for Rubber Reserve Co. during the war. Monsanto is purchasing the monomer plant for \$9,500,000 from the War Assets Administration.

• **Half of U. S. Total**—With this new plant and with expanded facilities at Springfield, Mass., the company will be producing polystyrene plastic at the rate of 80,000,000 lb. a year in 1947. This production rate is eleven times that of total U. S. prewar styrene production, and is at least equal to the country's prewar output of all thermoplastic molding compounds. (Polystyrene is one of a number of the so-called thermoplastics; others are the cellulose acetates, butyrates, and nitrates; ethyl cellulose; the vinyl compounds; the polyamides; and the polyethylenes.)

According to the company, the entire plastic industry in this country and Canada will be producing polystyrene at the rate of 150,000,000 lb. a year or better in 1947. Monsanto's contribution then will be at least half.

• **Big Expansion Plans**—The new facilities at Springfield, Mass., with those at Texas City represent a major item in the company's proposed \$14,500,000 expansion, which figure is exclusive of the \$9,500,000 paid for the monomer plant.

The Texas City installation will utilize two large buildings, used until about 1933 as a sugar refinery, which adjoin the styrene monomer plant. These buildings were constructed in 1923 and were purchased by Monsanto in 1942. Styrene monomer will be piped directly from the styrene plant to the styrene plastic manufacturing unit. Nearness of

the two facilities will also permit an integration of supervisory and operational detail.

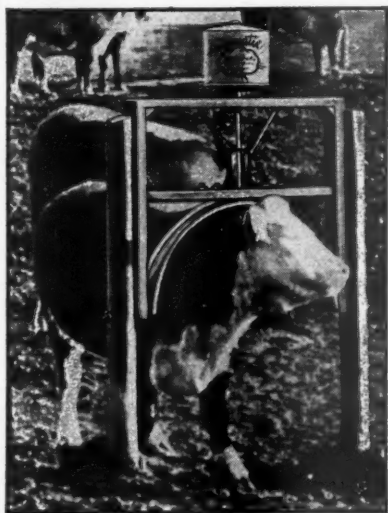
• **On Deep Water**—Equipment is on order for installation in the manufacturing plant. Adjoining the site is a dock with an 810-ft. berthing space and a depth of 32 ft. at mean low water. This will permit use of water transportation to both eastern and western ports.

The location also is served by the Texas City Terminal Railway Co., which connects with the Santa Fe, Southern Pacific, Missouri Pacific, and Missouri-Kansas-Texas railroads.

Canadian plant facilities for production of styrene plastic, announced by Monsanto in March, are also expected to be in production by fall. This plant is designed to serve the requirements of the Canadian market and at the same time make substantial quantities available for world export.

• **Price Level Drops**—Since 1939, the price of polystyrene has dropped from 72¢ a lb. to the present base price of 25¢ a pound for the crystal molding polymer in carload quantities. This price level, together with the material's low specific gravity, makes it one of the lowest cost molding plastics available.

The thermoplastic is a resin of crystal clarity which can be modified to give an unlimited variety of color effects. It has



TREAT AND TREATMENT

Combining business with pleasure, cattle do their own back scratching with steel or fiber brushes (above) and at the same time rub themselves with a dose of DDT or other insecticide. Automatic Equipment Mfg. Co., Pender, Neb., makes the device, which, the Agriculture Dept. figures, will pay off in increased milk yield of from \$15 to \$20 a year per cow.

JIM'S WORKING
LATE AGAIN . . . IS
HE SO MUCH
BUSIER THAN
WE ARE?

NO . . . IT JUST
TAKES HIM LONGER
TO GET THINGS
DONE.

Are you a "Midnight-Oil Burner"?

If you are, is it necessary? Thousands of busy men have found that the suggestions in Hammermill's idea-book, "3 Steps that Get Things Done," help them clear up their full day's work, efficiently, by quitting time.

It shows how the easy-to-form habit of "putting it in writing" really does Get Things Done. Why not try this practical, office-tested plan?

And when choosing paper for the forms and letterheads on which efficiency so largely depends, rely on the paper made for business use—Hammermill Bond. Check coupon below if you'd like a free sample book.

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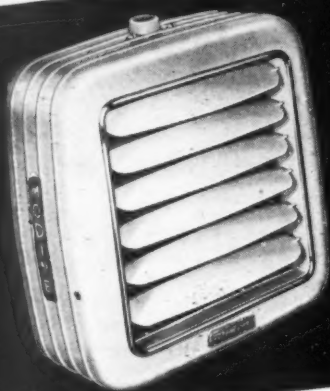
Position _____

(Please attach to, or write on, your business letterhead)

BW-9-7

ANNOUNCING THE *Modine* UNIT

 **HERE TODAY..A Complete Line of the most Beautiful Unit Heaters Ever Developed!**



HORIZONTAL DELIVERY

23 Models The most popular type of Unit Heater ever built for general industrial and commercial applications. This is the type with the well-known Modine patented center location of supply and return connections which provides direct-from-pipe-line suspension... for low cost, fast installation.



VERTICAL DELIVERY

16 Models Designed for overhead installation, new Modine Vertical Delivery types can be located up near the ceilings of high bays to clear production equipment and crane ways—or at low levels as in stores and offices. Delivers large volumes of air at high velocity and comfortable temperatures directly downward.

NOW
control heat
distribution as
easily as you
control light

Notice the wide range of heat-throw



E GREAT NEW 1947 T HEATER LINE

st **Three Distinct Types..to Meet the Challenge
of Today's Complex Heating Requirements!**

HERE'S a new line of Modine Unit Heaters designed to meet practically every space heating need of modern industrial and commercial buildings. Modine now gives you three separate and distinct types, developed as a matching, integrated line with 47 basic capacities. Never before has propeller unit heater design been so closely adapted to the expanding applications of unit heating . . . or to the critical requirements of unit heater application engineers.

Strikingly attractive appearance — a result of modern styling and beautiful color treatment of all models, opens a broad new range of installation opportunities. Units are finished in biege-gray enamel with sparkling polished chrome trim.

Advanced design features improve heating performance . . . lengthen service life . . . offer greater versatility of application. If you're planning to build a new plant or store, investigate the Modine line. For complete information, see the "Where-To-Buy It" Section of your phone book, or send in the coupon below.

Modine
UNIT HEATERS



NEW POWER-THROW

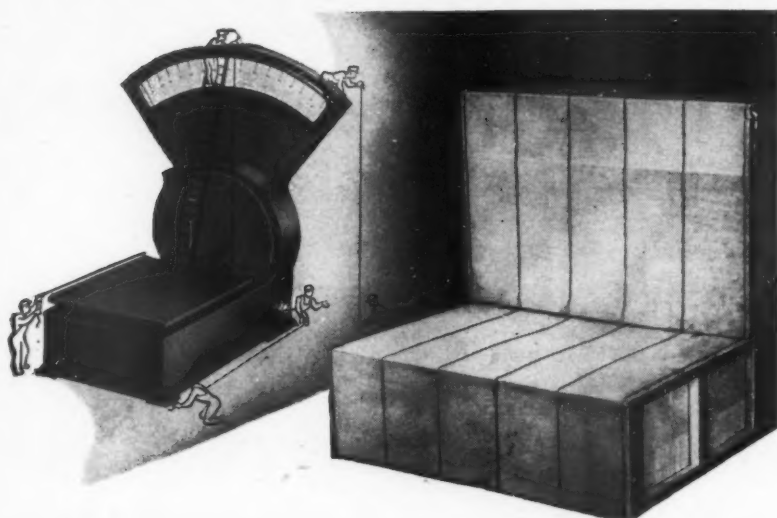
8 Models . . . A revolutionary new type of horizontal delivery unit heater designed for specialized industrial applications. Where machinery or other plant equipment impede air delivery of standard units, the powerful, scouring, jet action of the Power-Throw is ideal for providing the desired penetration.

MODINE MANUFACTURING COMPANY
1740 Racine Street
Racine, Wisconsin

Gentlemen: Yes! I want all the facts about the great, new 1947 Modine Unit Heater Line. Please send me complete information.

Name.....
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City.....

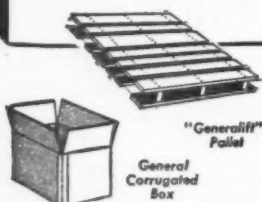
w patterns available!



Designed for Giving PERFECT PRODUCT PROTECTION

NEW "GENERALIFT" PALLETS

Millions of pallets were used by the armed forces. They saved from 50% to 90% in materials handling. We are now in full production of pallets for all industry. Our engineers will design a pallet best suited to your specific needs. Write today for Pallet Book.



NOTE: Shortage of timber products today is even more critical than during the war. This is due to adverse weather conditions, labor difficulties, pricing adjustments, war-marking and priority of lumber for erection of homes for veterans, etc. For these reasons, we, like so many others, cannot guarantee production and shipment in terms of usual schedules.

ENGINEERED SHIPPING CONTAINERS

General BOX COMPANY

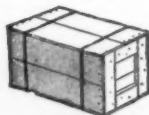
GENERAL OFFICES: 502 N. Dearborn St., Chicago 10, Ill.
DISTRICT OFFICES AND PLANTS: Brooklyn, Cincinnati, Detroit, East St. Louis, Kansas City, Louisville, Milwaukee, New Orleans, Shelbyville, Winchester.
Continental Box Company, Inc., Houston, Dallas.

Wherever products are packed, there is a need for GENERAL-Engineered Shipping Containers.

They're designed specifically for the product . . . designed to faithfully follow the profile of the product. Special inner-packing, blocking and reinforcement provide added protection . . . prevent shifting and damage in transit.

Let us tell you about GENERAL'S "Part of the Product" Plan. Learn how GENERAL Engineered Shipping Containers save materials and man-hours . . . conserve shipping space and speed production!

Our engineers will be glad to help you with your packing problems. Write today for information.



General Nailed Box



General Cleated Corrugated Container



General Wirebound Crate

unusual dimensional stability, as well as resistance to acids, alkalies, and a wide variety of solvents. The demand for styrene plastic molded parts has been exceptionally heavy for use in home refrigerators, cosmetic containers and closures, acid-type battery cases, plumbing fixtures, kitchen utensils, dishes, and hundreds of other applications.

The styrene monomer plant was designed and constructed by Monsanto. It was the first styrene plant to go into operation in the government's rubber producing program, supplying about 21% of the styrene needed to meet the nation's synthetic rubber requirements.

OFFICE STANDARDS URGED

Standardization of office equipment, supplies, and labor-saving devices used in offices, has been recommended to the American Standards Assn. by representatives of manufacturers, office management groups, large users of office equipment, and government procurement agencies. The purpose of the program is to simplify office procedures and bring about economies.

The conference recommended that the first work to be undertaken should be confined to office equipment and furniture, office supplies, and labor saving office machines. Some of the groups have already developed standards for use among their own members.

The fact that users of office equipment, lacking nationally recognized standards, frequently differ in their requirements has meant that manufacturers must produce a large number of different sizes and styles. On the other hand, users of office equipment often have difficulty because of the variations that occur in the products of different manufacturers.

P. S.

A process for coating sheet metal with a solid polymer of ethylene has been invented by a du Pont chemist. The baked-on coating will withstand bending and crimping, is said to provide protection comparable to conventional tin-coating.

An artificial leather, made of paper and synthetic latex, was considered by the Germans to be the most promising application for Neoprene, according to Office of Technical Services, Dept. of Commerce report PB 19857. In making the artificial leather, paper was impregnated with Neoprene latex, then dried and hot pressed at about 120 C.

Built for 30,000-lb. electric industrial ram trucks used in steel plants, a new Exide-Ironclad battery weighs five tons and has a capacity of 1,500 ampere-hours. It is said to be the largest storage battery ever built for industrial trucks.

NEW PRODUCTS

Prefabricated Darkroom

The "Blak-a-Zell" darkroom, complete except for photographic apparatus, can be assembled from prefabricated sections in six hours by one man, or in four hours by two men, according to the dis-



tributors, Alco Photo Supply Co., 15 W. 47th St., New York. The unit is equipped with plumbing, shelves, racks, stainless steel sink, air filter, and complete wiring. Side walls are bolted together, with sponge-rubber gaskets. The roof, which contains most of the wiring, is hinged. Plumbing can be connected to garden hose if desired. Space is provided for an exhaust fan.

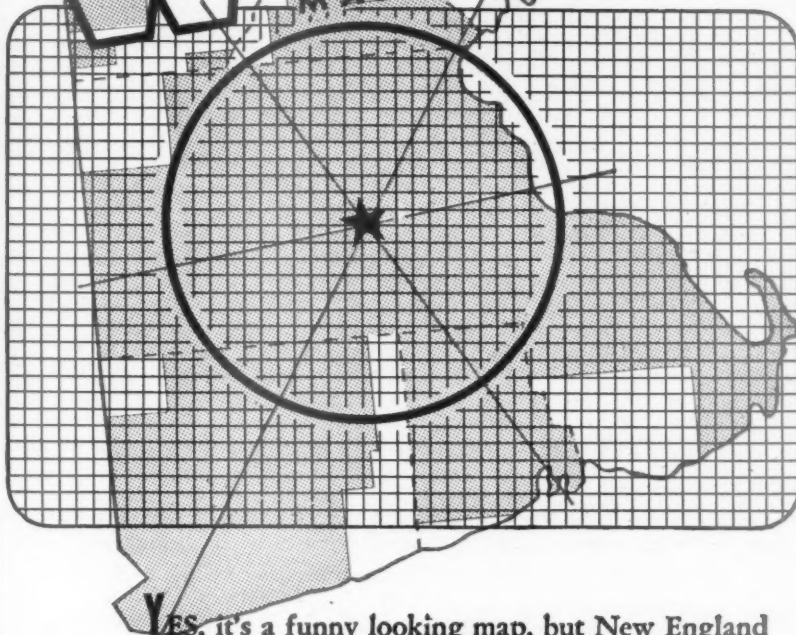
Oil Seal Packing

Developed by the Johns-Manville Corp., Manville, N. J., for the protection of bearings, a new type of non-metallic oil-seal packing is called Clipper Seal. To obtain necessary rigidity for press fitting, the heel of the seal is made of resin-bonded fabric. The lip is a flexible compound and is so designed that it is possible to vary the bearing area and to control lip pressure against the shaft by means of a garter spring. The seals, made in sizes from 15/16 in. to 37 in. diameter, are said to provide positive lubricant retention and to exclude dirt.

Stoker Drive

A universal drive designed to cover in three sizes the entire range of screw-feed stokers from the 15-lb.-per-hr. household unit to the 1,200-lb.-per-hr. industrial size is being produced by Stoker Drive Co., Frederick, Md. Cone-drive gearing, with a ratio of 200 to 1, operates in conjunction with a 4-to-1 belt drive to step down motor speed from 1,750 to 2.2 r.p.m. for the gear

* GEOGRAPHICALLY... it's WORCESTER MASSACHUSETTS



YES, it's a funny looking map, but New England looks like that in terms of purchasing dollars. Here is a five billion dollar retail market, and Worcester is its logical center. Within a 75 mile radius are nearly six and a half million consumers representing 76% of the New England market. This compact area encompasses three times as many consumers per square mile as the U. S. average.

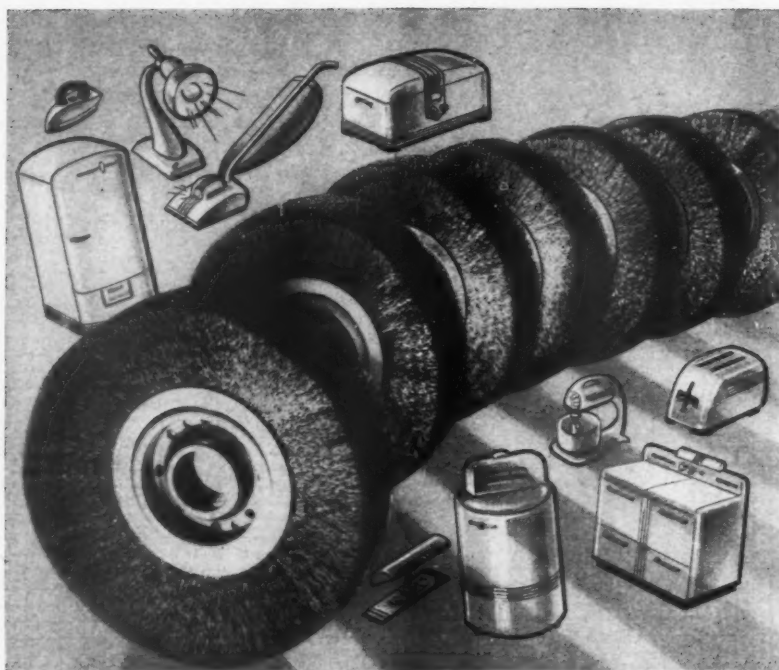
Worcester's three major railroads, fifty motor truck lines and excellent air service enable you to profit from these advantages.

It's the ideal location for your branch plant or distribution center with stable, skilled and varied labor supply.



Write the Industrial Bureau, Worcester Chamber of Commerce, for additional information. A staff of Engineering Consultants is available to serve you.

WORCESTER... The Crossroads of New England!



Shape of *Better* things to come

NEW PRODUCTS will always be coming—a great many are on the way or arriving right now. And they'll have to be *better* products to stand up against vastly increased competition.

Now is the time to discover how power brushing can help you make them better. Better looking . . . better performing . . . and better selling!

New power brushing techniques as developed by Osborn, 50-year pioneer and leader in the field, can help you cut costs, by cutting operating time on all finishing operations. These new techniques can be applied to almost any product and material.

It will pay you to investigate now. Write, wire or phone Osborn and an expert field engineer will be detailed to make a thorough study of your operation or plans. He will then submit to you specific recommendations. No obligation, of course.

THE OSBORN MANUFACTURING COMPANY

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Cleveland, Ohio



WORLD'S LARGEST MANUFACTURER OF BRUSHES FOR INDUSTRY

shaft and stoker feed screw. Cast-iron gears run on steel pinions.

Twin-Unit A.C. Welder

A twin-unit, outdoor a.c. arc welder in a single inclosure, announced by the Electric Welding Division of the General Electric Co., has two circuits which can be used simultaneously or independently with electrodes up to $\frac{3}{8}$ in. in diameter, or combined into one circuit for heavy welding with $\frac{3}{8}$ -in. electrodes.



The units have a current range of from 90 to 270 amperes, when used singly and from 180 to 540 amperes when operated in parallel.

A control reduces the open circuit voltage to approximately 30 volts when the machine is not welding, but makes full power available the instant the arc is struck. Both halves are supplied through a single set of primary terminals, so that only one power-line circuit to the unit is required.

Protection is provided by drip-proof construction of all openings in the top of the inclosure and by a sealed window over current indicators. Ventilating openings are placed at top and bottom.

Room Conditioners

Three new air-conditioning and cooling units have been announced by York Corp., York, Pa. While cooling each conditioner can remove 60 ft. of air per min. When conditioning, the units move 240 cu. ft. of air per min. Moisture condensed from room air is removed by evaporation, and no plumbing connections are necessary. The smallest unit is powered with a $\frac{1}{2}$ -hp. motor, the two larger are powered with $\frac{3}{4}$ -hp. motors. All units are portable.

Interpolation Charts

Available in standard 8 $\frac{1}{2}$ x11-in. punched sheets, a series of charts devised by F. B. Gerber, 1305 S. W. 12th Ave., Portland 1, Ore., simplify mathematical calculations involving proportional parts. No abstruse mathematics is required, and the tables assertedly

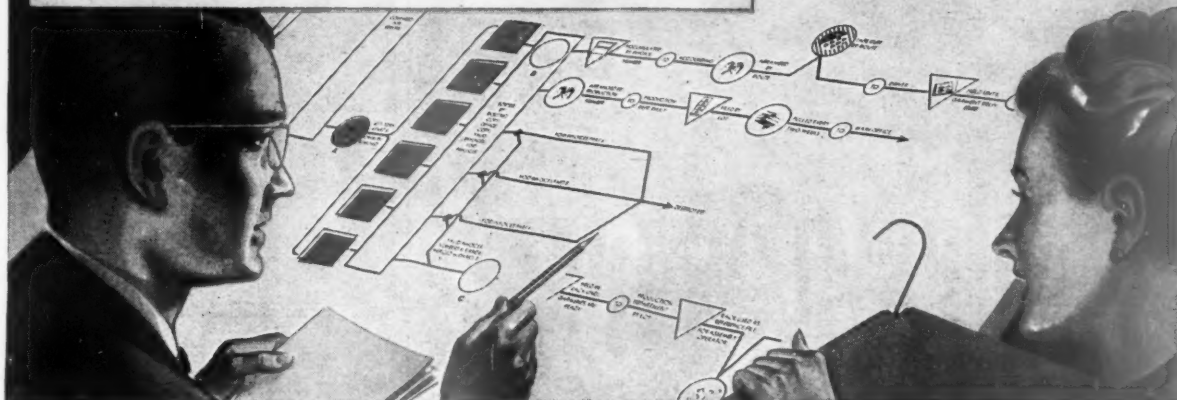


Billing operations shrink to half size at large Milwaukee Dry Cleaning Plant

By applying Standard Register's exclusive paperwork simplification techniques, Milwaukee's Spic and Span Dry Cleaners save 13 clerical operations per garment... cut number of invoices per order in half... reduce error hazards... achieve better over-all control of the garments that pass through the plant, each day.



PROCEDURE FLOW CHART



Exclusive! Different! Standard Register's analysis-built systems save most where systems cost most

YOU'LL FIND that waste and inefficiencies in record systems seldom tap management on the shoulder and call attention to themselves when they become costly. You'll also find that they generally bury themselves too deeply to be uncovered by the usual office or systems study.

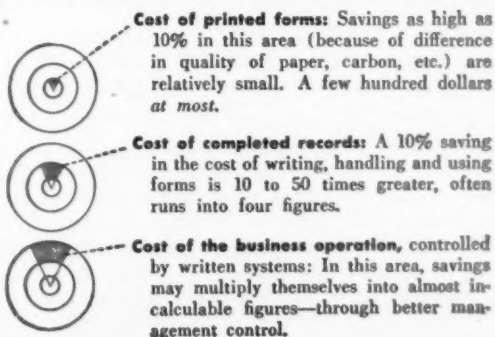
That's why more and more companies are welcoming Standard Register's entirely different, more deeply probing approach and methods. Through a tested, scientific, step-by-step procedure (including analytical flow-charting of your present record system)... Standard Register uncovers work-making form design, time-wasting methods of writing and using forms.

Each of more than a score of pre-tested steps leads directly to paperwork savings where they count most—in the cost of completed records and through better over-all management control.

Write for Formcraft Digest D-192 which explains the

above system, and illustrates Standard Register's techniques of system analysis and simplification.

PROBLEM: FIND THE AREA WHERE SAVINGS COUNT MOST



THE STANDARD REGISTER COMPANY

Manufacturers of Record Systems of Control for Business and Industry

109 CAMPBELL STREET, DAYTON 1, OHIO

Pacific Coast: Sunset McKee-Standard Register Sales Co., Oakland 6, California. Canada: R. L. Crain Limited, Ottawa. London: W. H. Smith & Son, Ltd.

CIGARETTE PACKAGING

PAPER BAG MAKING

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AUTO ACCESSORIES

LEATHER AND LUGGAGE

BOOKBINDING

WOOD WORKING

FROZEN FOODS

LAMINATING

BOX GLUING

LINER SEALING

ENVELOPE MAKING

“Resyn” adhesive

is the answer a

EACH “RESYN” Adhesive is a complex blend that is designed to do a specific job exceedingly well. Many amazing developments have resulted from applying them to packaging, converting and assembling operations previously thought to be at their highest level of efficiency.

Why? Because “RESYN” adhesives provide higher resistance against all forms of moisture and temperature variations. They’re vermin-proof, mould-proof, age-proof. They’re economical. They increase production speeds, reduce supervision, offer greater versatility, spread and penetrate uniformly, and bring increased sales advantages to many products.

What are some uses? *In bag making:* for difficult stocks . . . breather action . . . moisture vapor barrier. *In luggage making:* for softness and pliability . . . resistance to fungus . . . laminating before shaping under heat and pressure. *In chemical packaging:* for all-purpose, all-weather labeling and overcoating on wood, fiber, painted steel, tin and glass. *In upholstery:* for adhering cloth to cloth, chipboard, wood, metal, wadding, etc.

A whole new world of uses is opening up for “RESYN” adhesives. They’re readily available, so get acquainted with their types, properties, uses. All are clearly explained in National’s booklet: *When and How to Use “RESYN” Adhesives*. Write for your copy — now!



● Offices: 270 Madison Avenue, New York 16; 3641 So. Wabash Avenue, Chicago 32; 735 Battery Street, San Francisco 11, and in other principal cities. In Canada: Merodith, Simmons & Co., Ltd., Toronto. In England: National Adhesives, Ltd., Slough.

National ADHESIVES

EVERY TYPE OF ADHESIVE FOR EVERY INDUSTRIAL USE

eliminate all pencil figuring. The charts also facilitate the construction of special tables and graphs.

Electric Lawn Mower

A popularly priced electric lawn mower with motor mounted inside the steel cutting-blade reel is now in production and is being marketed under the trade name “Electrimo” by Weaver Sales Division, 530 Broadway, San Diego, Calif. The mower rides on two free-turning metal rollers located behind



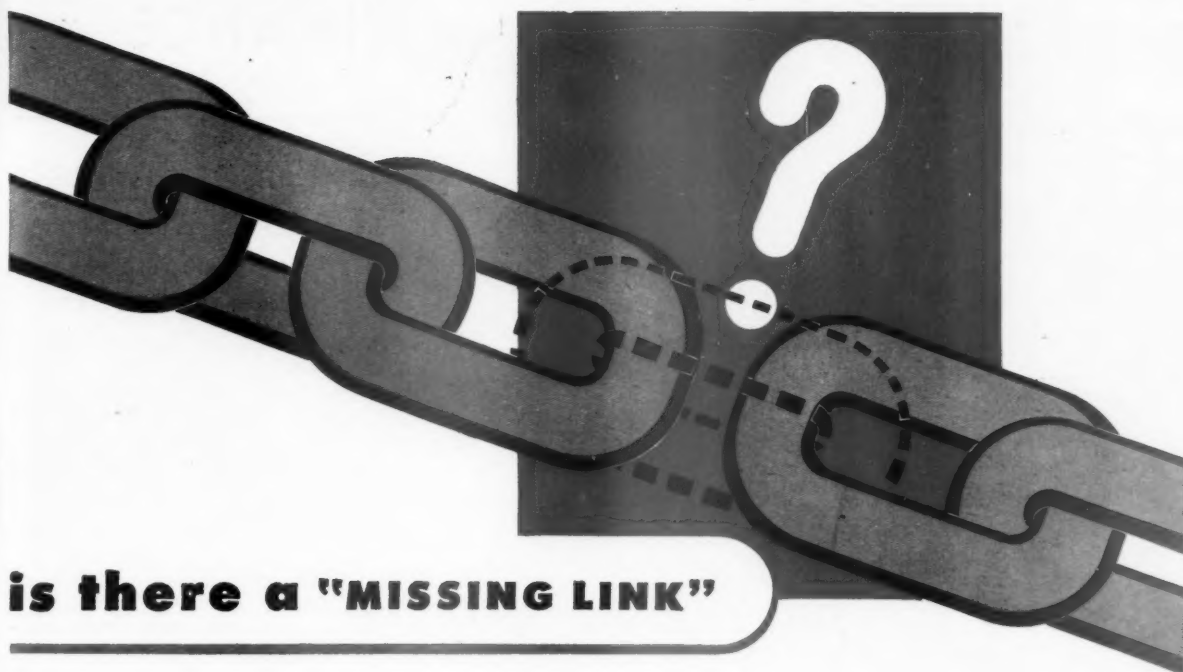
the 16-in. cutting blades which extend to within less than 1 in. of the extreme outside dimensions of the frame. Two small wheels at the forward end of the frame keep the mower from “nosing in” when approaching sharp inclines or terraces. Motor is controlled by push-button on handle. The button snaps off automatically when hand pressure is released.

Cutting blades are protected from damage by a slip clutch. Cutting level is adjustable to two heights. All bearings are prelubricated and presealed. Weight complete is 40 lb.; outside width is 17½ in.; Universal motor operates on 110 volts.

Time-Study Camera

Developed by Bell & Howell, 7100 McCormick Rd., Chicago 45, the new Electro 16-mm. camera is especially adapted to accurate time and motion study work. Picture frequency, or camera speed, is calibrated in multiples of a thousand frames per minute. Thus individual pictures or frames can be readily translated into “therbligs”—the standard unit of measurement in job study.

The camera is equipped with a 21-mm. F 1.9 lens, a dial-footage indicator, and controls which permit operating speeds of 1,000, 2,000, and 4,000 frames per minute. It is driven by a 24-volt motor. The camera is magazine-loaded. A transformer, standard equipment, is supplied for use on house lines.



is there a "MISSING LINK"

..in your production line?

Hendy can build industrial machinery for every need.

If you can't get rolling into reconversion because you lack specialized machinery, why not let Hendy build it for you? Hendy's specialty is producing the industrial equipment you need *when you need it*.

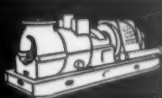
The 82-acre Hendy plants, among the finest in the country, contain two complete foundries, five major machine shops, and all the other facilities necessary to build machinery to your most severe requirements. The skilled workers, technicians and engineers of Hendy have that extra insight into mechanical problems that comes only with years of experience.

Don't delay your production a second longer. **Write today** to General Equipment Dept., Joshua Hendy Iron Works, Sunnyvale, California.

HENDY
can build it!

EST. 1856

JOSHUA HENDY IRON WORKS • Plants: Sunnyvale, California and Torrance, California • CROCKER-WHEELER ELECTRIC DIVISION: Amper, New Jersey



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The newspaper nobody wanted

THE smart boys in the New York city rooms said the newspaper was a flop. Circulation was dropping every day and advertising was at a new low.

Nevertheless a group of businessmen decided to take a chance, and looked around for a managing editor. All the big-time newspapermen turned the job down. They said it would take millions to revive the paper.

This same spring of 1896, a successful young small-town publisher came to the big city looking for a newspaper opportunity. In time he met the group, and they liked him, his record, and his ideas.

The group invited the young man to join the syndicate. He refused. It involved more money than he had, or cared to borrow. As an alternative, they offered him the management of the proposed paper at \$50,000 a year. He refused again. He didn't think he could run a newspaper his own way and satisfy absentee owners at the same time.

Eventually the paper went into receivership, scheduled to last only until the group's plan of reorganization was adopted. But the plan failed. So the men encouraged the young publisher to submit his own plan. He did—and it was accepted.

The next thing he did was to come to the Bank of Manhattan. The Bank's officers concluded that here, despite his youth, was a man with great vision and abilities. A loan of \$50,000 was arranged, which enabled him to acquire an interest in the paper.

Within a few months, circulation and advertising started to rise. People began to read and comment on the paper's editorials. In a year it was out of the red, and in four years the young publisher was the controlling stockholder. The paper's reputation spread throughout the Metropolitan area—throughout the country—and, finally, throughout the world.

The name of the young publisher was Adolph S. Ochs, and the paper, *The New York Times*, which is this year celebrating the fiftieth anniversary of his association with it.

The Bank of Manhattan files are full of success stories such as this. For at this Bank, businessmen find not only financial assistance, but equally important, imagination—capable of recognizing and encouraging great enterprises in the making.



Bank of the Manhattan Company

NEW YORK

COMPLETE TRUST SERVICE

Member Federal Deposit Insurance Corporation

FINANCE

(THE MARKETS—PAGE 102)

Offerings Dwindle

Most sellers, underwriters, and buyers prefer to remain on the sidelines until new issues market shows more strength.

New York Stock Exchange member firms and over-the-counter security trading houses weren't the only segments of Wall Street to feel the chill of adversity last month. The new issues market, as predicted (BW—Aug. 3 '46, p68), also received its share of bumps.

August, in fact, proved that market's slowest month with respect to new business since the "holiday" periods that were necessitated by the war loan drives. Few bond issues were seen, and much of the new stock activity was accounted



OPERATION SUCCESSFUL

When another old-time railroad—Seaboard Air Line—emerged triumphantly from a 16-year receivership recently, Legh R. Powell, Jr. (above), slipped back into harness as president. Henry Anderson, railroad attorney and co-receiver with Powell during Seaboard's bankruptcy, became chairman. Powell began with the company in 1902—at \$20 a month—climbed from controllership to vice-presidency, was president when the road collapsed. He has been key man in its long road (BW—Apr. 21 '45, p64) to economic recovery.

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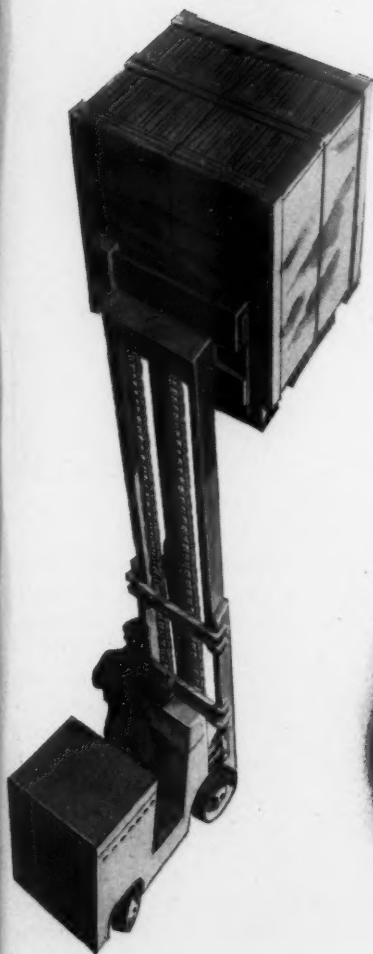
Are you troubled with **SQUARE** feet?

... that is, square feet of storage or warehouse space. Not enough and no more in sight? Or is present space too costly a burden on overhead?

The remedy is *high-tiering*, safely, with high lift *electric trucks*. Heavy loads on pallets or skids can be stacked to the roof or to comparable heights in open storage. Any selected load can be removed quickly, simply. Inventory control is made easier.

Self-loading *electric industrial trucks*, easily maneuverable in congested quarters, pay for themselves—fast—by increasing use of present space, by releasing space for other purposes, or by eliminating the need for additional buildings.

If "square feet" are a problem in your organization, copies of the **MATERIAL-HANDLING HANDBOOK** or of **UNIT LOADS** might help.



ASK FOR THESE FREE BOOKLETS
and find out why over 90% of the
electric trucks sold in the past
twenty years are still in service.

The Electric Industrial Truck Association

208 South La Salle Street, Chicago 4, Illinois

The New Underwood is here...



... with the Rhythm Touch!



Sit down to this handsome new typewriter . . . for the typing thrill of your life!

You sense something different the moment your fingers touch the keys.

It's *Rhythm Touch* . . . the latest development in Underwood's constant research to help make your work easier.

There's new ease for your fingers in the lightning response of every key. In the better balanced finger action. The effortless speed. The free-and-easy rhythm of the accurate, smooth-running mechanism.

You'll do more work . . . better work . . . with less fatigue. Besides *Rhythm Touch*, and many other new refinements, you have all the time- and effort-saving Underwood features you've always enjoyed.

Insist on having this new Underwood Standard Typewriter. It's a pleasure to work with . . . a treasure to own.

UNDERWOOD CORPORATION . . . One Park Avenue, New York 16, N. Y.

Underwood

TYPEWRITER LEADER OF THE WORLD

Copyright 1946, Underwood Corporation

for by previously arranged standby agreements covering offerings to which stockholders of the issuers had enjoyed first subscription rights.

• **Still on Sidelines**—There were some mid-August indications that the new issues market's July-August attack of indigestion might soon be a thing of the past. Judging from several subsequent events, however, most sellers, underwriters, and institutional and private buyers still prefer to remain on the sidelines pending some clarifying developments.

To that Wall Street group which traditionally dislikes to admit the existence of disturbing factors, the current hiatus is a temporary affair. Some congestion a while back may have slowed things up a bit, they say, but the recent lag has represented nothing but seasonal slowness resulting from the customary August preference of new issue market participants for vacations instead of business-as-usual.

• **Many Disagree**—There are many underwriters, however, who don't agree with this point of view. Various officials of recent would-be corporate and municipal borrowers can also be found who would testify to the contrary.

Consider New England Gas & Electric Assn. That company recently learned that under a recapitalization plan, needed to adapt its structure to requirements of the holding company act, it must sell \$22,500,000 of new bonds and enough common stock to insure cash proceeds of \$11,500,000. As a result, a few weeks back it requested bids (all new utility securities, by ruling of the Security & Exchange Commission, must be sold by competitive bidding) from underwriters covering this financing.

However, the company didn't keep its offer open until the bid-opening date it had originally set. Following the market closely, it decided, after reportedly talking things over with various underwriting houses, to call the auction off and await more propitious financing conditions.

• **Montreal's Financing**—Late August probably found Montreal's city fathers wishing they had followed N.E.G.&E.'s example, or better still had done their financing last winter.

In February, by a privately negotiated deal, Montreal had all but completed arrangements with a U. S.-Canadian syndicate, headed by New York's Harriman, Ripley & Co. and Montreal's Dominion Securities Corp., to sell some \$86,000,000 of new U. S.-currency bonds to refund then (and still) outstanding higher-couponed issues.

At the last minute, however, Cleveland's Otis & Co., long a prominent proponent of competitive bidding (BW—Jun.23'45,p70), stepped into the picture with a bid of 98.75% of par for



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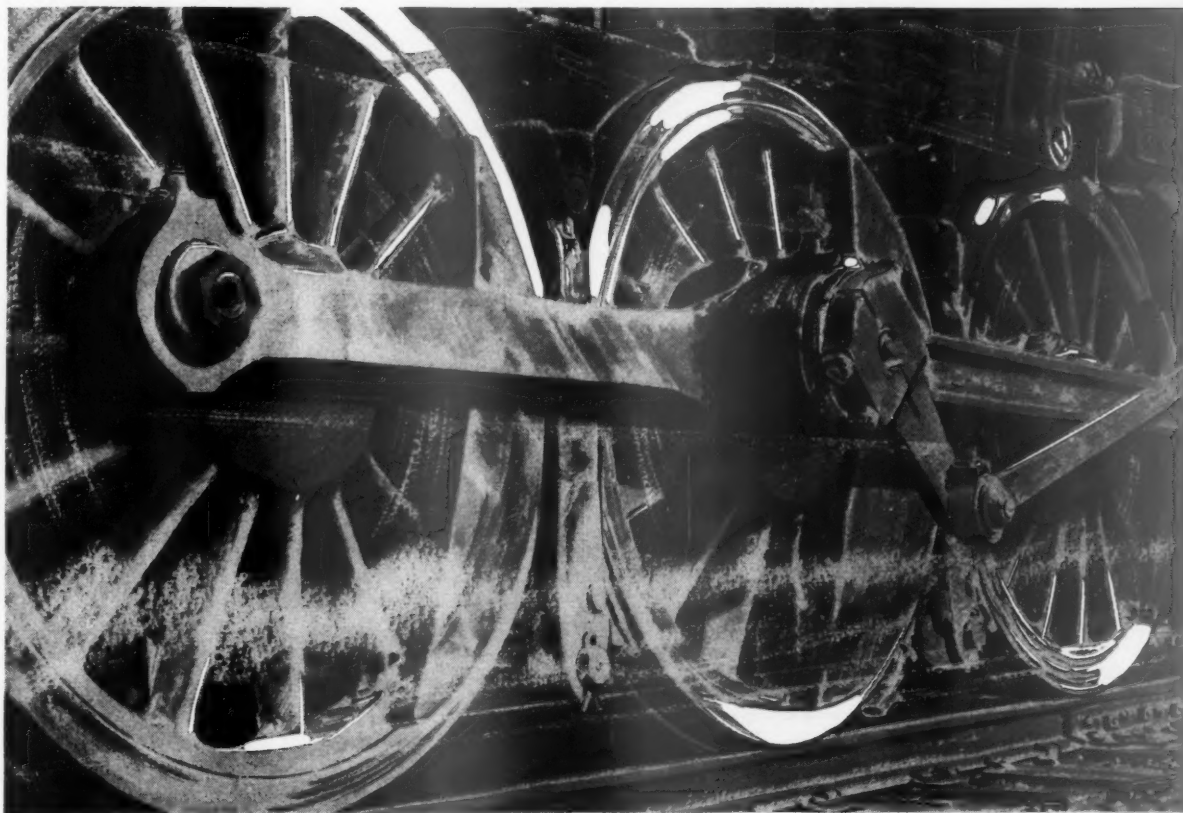
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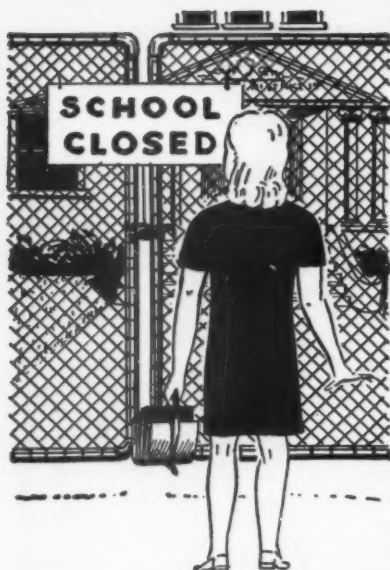
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Wartime Shift of Bank Deposits

Few segments of American business received more material benefits during the war period than the nation's banks. Between 1940 and 1945, for example, their deposits more than doubled. By 1945, their net profits had expanded to the highest levels since 1929 (BW—Jun. 8 '46, p115).

However, these weren't the only important war-produced banking changes. The widespread locating of

many new war plants and Navy and Army establishments in hitherto sparsely settled areas or in regions never before particularly industrialized, plus the wartime rush of workers to such sections, wrought a considerable change in the geographical location of bank deposits. As indicated in the 1940-45 tabulation below, the trend of new deposits flows to the South and the West.

Rank Dec. 31, 1945	State	Total Deposits Dec. 31, 1945	Rank Dec. 31, 1940	1940-45 % Gain
1	New York	\$46,387,349,000	1	66.37
2	California	13,255,770,000	4	179.48
3	Illinois	11,934,884,000	3	125.63
4	Pennsylvania	11,172,706,000	2	83.76
5	Massachusetts	7,611,467,000	5	67.76
6	Ohio	7,376,660,000	6	155.56
7	Texas	5,930,594,000	9	234.11
8	New Jersey	4,998,228,000	7	117.51
9	Michigan	4,909,161,000	8	147.81
10	Missouri	4,229,476,000	10	146.81
11	Minnesota	2,910,251,000	12	165.19
12	Indiana	2,903,775,000	13	101.19
13	Wisconsin	2,867,145,000	14	176.93
14	Connecticut	2,591,558,000	11	73.67
15	Washington	2,290,951,000	18	241.35
16	Iowa	2,126,896,000	16	186.31
17	Maryland	2,090,906,000	15	102.54
18	Tennessee	1,956,719,000	19	198.79
19	Georgia	1,870,453,000	21	230.88
20	Virginia	1,853,692,000	17	163.10
All U. S. Bank Deposits		\$167,324,000,000		117.66

Data—Polk's Bankers Encyclopedia, The American Banker.

bidding requirements with the state of the new issues market, the less attractive the deal appeared. As a result, on the day the bids were scheduled to be opened, the Harriman, Ripley syndicate sent a letter to the city instead of a concrete offer. This announced that the group wasn't interested in the issue on the basis demanded, but that it might be prepared to submit a "satisfactory" bid provided a price of 97½% of par wasn't required. Halsey, Stuart and its group, however, submitted neither a bid nor a letter. Apparently they just weren't interested.

Another illustration of the underwriters' loss of avidity for new issues was provided by the recent offering of \$7,900,000 of new bonds by Union Railroad Co., a U. S. Steel subsidiary.

• **Things Remembered**—In considering this financing, interested underwriters undoubtedly remembered that new Union Pacific 2½% bonds which sold at 108% of par before the new issues market started ailing are now selling at 105%, that Southern Pacific 2½s offered at 101½ are now only worth 95, and that S.P.'s 2½s are currently but 89½ against their earlier 1946 offering at par.

As a result, when Union R. R. offi-

cials opened bids, there were only two offers for the issue. The top price offered was 98.80% of par for 3% bonds. Rather than have its subsidiary accept that bid, Big Steel bought the bonds itself, apparently for the account of its pension fund.

• **Bright Spot**—One bright August event in the new issues mart, so far as bonds are concerned, was last week's very successful offering by a Morgan, Stanley & Co. syndicate of new Commonwealth of Australia bonds. However, this financing was very definitely cut, with liberal allowances, to fit current market conditions. Only \$20,000,000 of bonds were involved, they were due only ten years hence, bore a 3½% coupon, and were offered at par.

Some progress has been made in recent weeks by underwriters in removing sticky bond issues from their shelves. In many instances, price cutting has been necessary, and the resultant losses have probably cut rather sharply into some earlier 1946 underwriting profits. The underwriting houses have learned of late that it doesn't pay to bid too avidly for issues just to have the honor of handling them. They have become increasingly price-conscious. Reports in-

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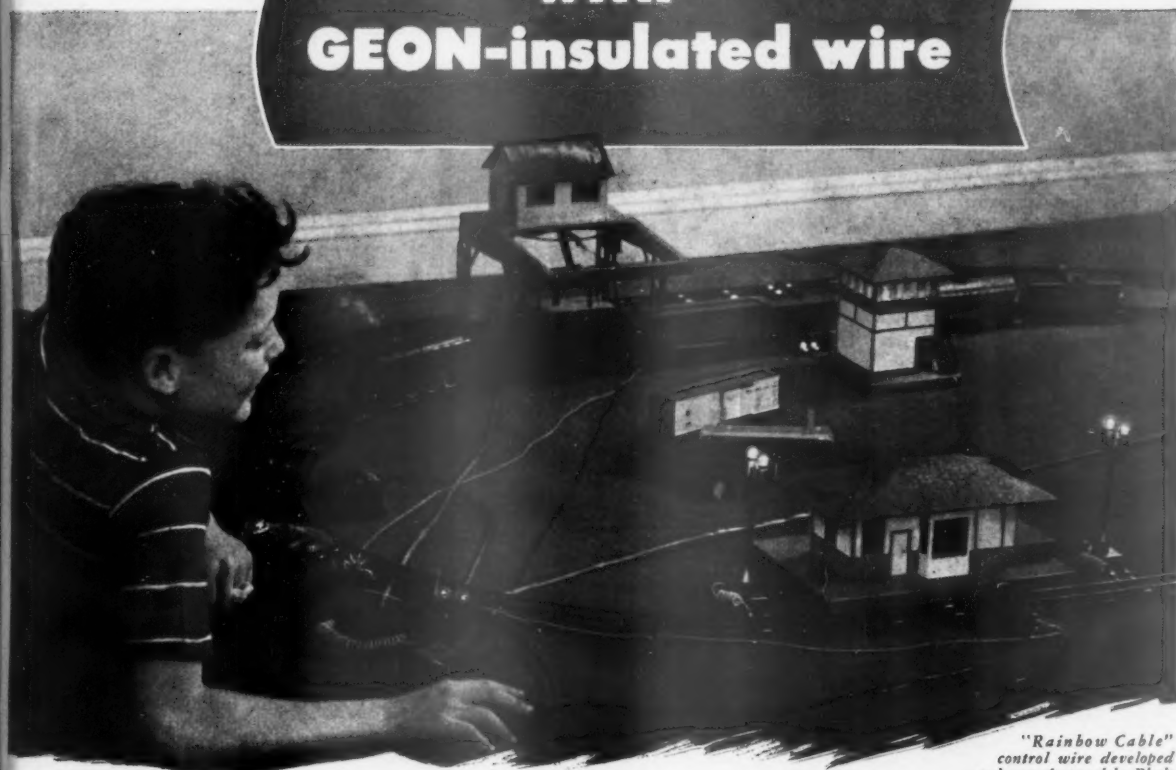
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dicade, however, that the recent hardening of money rates hasn't made the same impression on many corporate sellers of new issues.

• **Pretty Congested**—The stock side of the new issues market is still pretty congested. There's plenty of evidence that a substantial number of 1946 offerings have been far too high-priced (box, page 83) and have included far too many unseasoned issues of too speculative caliber.

Much "inside selling" (BW—Aug. 17'46, p57) continues to be seen. One day last week, for example, disclosed SEC filings covering seven instances of corporate financing. Five of these were for joint sales of stock by both companies and stockholder groups, and two for sales by stockholders only. Stockholder selling of already issued shares, moreover, accounted for 896,000 of the 1,106,759 shares of common stock involved. Some Wall Streeters believe that the recent steady parade of such sales isn't helping the morale of those normally interested in acquiring blocks of new stock offerings.

In the Banks, Too

United Financial Employees' petition for Empire Trust poll opens new drive while fight for brokerage clerks is still on.

In the midst of its efforts to unionize Wall Street's 30,000-odd brokerage-house clerks (BW—Aug. 24'46, p119), the United Financial Employees found the time last week to invade the field of commercial banking.

The independent union petitioned the New York State Labor Relations Board for a collective bargaining election among the 350 employees of New York City's Empire Trust Co., one of the financial district's smaller institutions.

• **Opening Gun**—This action was described by U.F.E. officials as the opening gun in a campaign designed to enroll most of New York's "tens of thousands" of bank clerks. They claimed that a "majority" of Empire Trust's clerks had already been signed up by the U.F.E.

Workers in 17 of New York's banks have already been circularized, and outside observers say that much "inside" organization work has been accomplished.

M. David Keefe, 35-year old U.F.E. head, a former New York Stock Exchange floor employee, reports that the drive in the banks will at first be centered mainly on the guards and messengers. Once that group has been signed up, the goal will be a \$52 weekly wage

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level. This, Keefe says, represents about a 30% raise.

Many an onlooker, however, doesn't believe that U.F.E. is actually confining itself, at present, to guards and messengers. More than a little recruiting among other employees is reported.

A good deal of U.F.E.'s success to date is explained by its makeup. Except for Keefe, all its officials and organizers are still full-time, or part-time, Street employees. They talk the language of those they are trying to recruit.

• **Union's Program**—Bulldozing organizing tactics have not been used thus far. Nor has U.F.E. asked its members to vote approval or disapproval of Uncle Sam's foreign policy or other matters with a political tinge. Its dues are likewise moderate.

U.F.E.'s publicly announced platform for brokerage house clerks calls mainly for an over-all increase of 25% in salaries, a bonus computed on volume of trading, pension fund benefits, and job security.

No such bank clerk manifesto has yet been issued. However, some who have been solicited report that emphasis has been on charges of (1) nepotism in advancements to better jobs; (2) bank maintenance of caste systems (best illustrated, the union says, by the month vacations given many officials as against the two weeks given most of their clerks); (3) the "pettiness" (as U.F.E. puts it) of most banks in retaining a 40-hour work-week during this summer's Saturday closings to avoid paying for overtime on weekdays. Capital is also being made of the fight many banks waged against installing the five-day week this summer.

• **Sore Spots**—Inside informants say that in more than one instance a veteran clerk has been turned into a disgruntled employee by his discovery that newcomers were being started at salaries approximating his own. Such sources report, too, that the union's path has been smoothed by hardshell senior supervisory officials who, in times past, have vetoed raises or other concessions suggested by competent personnel departments.

U.F.E.'s present idea is to have all its brokerage house contracts expire simultaneously so that if it should ever be necessary to "call a strike, it will be on a scale large enough to cause serious disruption."

• **And Then?**—Whether the union intends to follow the same practice if it organizes a large segment of New York City's bank clerks isn't yet known. One thing, however, appears certain. Oct. 15, the day U.F.E.'s present New York Stock Exchange contract expires, may prove a memorable Tuesday for stock trading unless a compromise is worked out beforehand with the first union ever to make a dent in Wall Street.

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A. T. & T. shareholders will vote in October on stock and bond proposal, the largest in U. S. corporate history.

Provided stockholders agree to the proposal at a meeting on Oct. 16, American Telephone & Telegraph Co. will embark on the biggest new money financing operation in American corporate history. Now contemplated is the sale of up to \$351,000,000 of new convertible debentures, and some 2,800,000 shares of new stock.

• **Direct Sale Planned**—A. T. & T. does not figure on calling upon Wall Street's new issues market to aid it in disposing of the new bonds. It is proposed to sell the entire issue direct to stockholders by giving them the privilege of purchasing \$100 of the new debentures for every six shares of A. T. & T. stock now owned.

Complete details will not be available until a Securities & Exchange Commission registration statement covering the bonds has been filed following the October meeting. However, they are not to bear more than a 2% coupon nor mature later than Dec. 15, 1961. They



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Lucky Hollywood husbands can count on "Memory Prompts" to remind them of impending anniversaries and take orders for flowers, candy, and gift wares to fit the occasion. The service is operated by Marion Peters (right), former dancer disabled by polio, and Mille Peare. It costs customers nothing since the merchants—usually florists—pay the commission.

1946 Batting Averages

That "all is not gold that glitters" where the 1946 new issues market has been concerned is graphically illustrated by a recent review of Jan. 1-July 31 results in that mart. According to Shields & Co., the New York Stock Exchange house compiling this study, only 39.9% of 213 new common stock issues sold in that period were selling above their original offering price on Aug. 1. On the other hand, 41.3% disclosed a decline, and 18.8% were either unchanged or disclosed a change that amounted to less than \$0.50.

Of the 92 new preferred stock issues checked, only 35.8% were selling above the price at which they had been first offered. Exactly 25% were unchanged, or virtually unchanged, on Aug. 1. However, 39.2% of them revealed a loss.

Certainly this showing disclosed no improvement during August. Many of 1946's earlier offerings, in fact, proved very vulnerable to the late-August price breaks in the security markets.








will be convertible into stock at not over \$150 a share during a period not to start later than four months after issuance or end earlier than three years before maturity date.

• **Stock to Employees**—All of the new stock is to be sold to employees of A. T. & T. and its subsidiaries. Under the plan it will cost them \$150 a share as long as the average market price is \$170 or higher, and less should it sell in the open market under that figure. Payment would be made at the rate of \$5 a month per share, and each worker would be permitted to subscribe for one share per \$500 of yearly salary. No officer would be eligible to participate, and no eligible employee will be permitted to purchase more than 50 of the shares.

Proceeds from the financing would be used to finance the Bell System's construction program, the largest in its history. When the year opened A. T. & T. and its companies had unfilled orders for 2,000,000 telephones. It has since installed about 1,800,000 but can still boast of over a 1,700,000 backlog. To handle this load a huge amount of capital must be poured into central office equipment and collateral plants, and many believe that the system is destined to spend more than the \$2 billion it estimated some time ago its post-war additions and improvements would cost.

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LABOR

A.F.L. Wins Coast Victory

Dave Beck's teamsters score a smashing success in the California cannery elections, putting C.I.O. on defensive in area where it made a desperate effort to beat its rival union.

The A.F.L. victory last week in the biggest National Labor Relations Board elections yet held west of the Mississippi means a good deal more than that California's better than 50,000 cannery workers are now in A.F.L. Teamster Dave Beck's camp.

Although the C.I.O. has already indicated that it will go to court over the matter and has publicly described it as an "illegal and undemocratic" election, it, as well as everybody else, is well aware that this contest called out a major show of strength between the two rival trade union bodies. And they are aware too that whatever the reasons behind their loss may be, the result of this defeat is a serious blow to the whole of the C.I.O.

• **Second Largest**—As NLRB elections go, this cannery affair was not only big (only the Ford elections in 1941 involved more workers), it was also one of the most legally complicated rows that has yet risen to harass the board. Weeks ago it was a foregone conclusion that whoever lost the vote would carry the fight to the courts. Up until the actual counting last Sunday in San Francisco's Palace Hotel, however, the general hunch was that it would be the A.F.L. which would be going to law. Newsmen, labor dopsters, some of the canners, and, of course, the C.I.O. itself were actually expecting a C.I.O. plurality.

The vote was close. And the A.F.L. has not yet chalked up the required majority. It is about 680 votes short of that. But the federation came out of the first counting with a plurality, and it asserts that when the challenged ballots are counted it will have a comfortable majority.

Over 2,000 of the 33,000 votes cast were challenged. The C.I.O. would have to gain all but seven of those to win a majority and it has no hope of doing that. Moreover, since most of the challenges are said to be C.I.O. challenges, it is generally assumed that most of those votes will be likely to be A.F.L.

• **Riding High**—But whether or not they gain the required majority, whether or not they are eventually certified by NLRB as the negotiating union, the West Coast teamsters, with whom the

A.F.L. cannery workers unions are affiliated, are now riding the crest of the wave.

In the first place, per capita dues from 52,000 to 55,000 members are nothing to be sneezed at and the cannery workers are already paying their dues to the A.F.L. Last April, the California Processors & Growers Assn. signed a contract with the A.F.L. It was signed some months after NLRB had set aside the first cannery election which took place last October in which the C.I.O. won a plurality and claimed a majority (on the basis of the challenged ballots). For various and sundry reasons that election's results were set aside and plans for a second election laid



OUT OF SEASON

Santa Claus made an early appearance in Manhattan last week to support the C.I.O. wholesale and warehouse workers' two-week strike against Schranz & Bieber Co., toy wholesalers. Aimed at buyers stocking up for the holiday trade, the Santa stunt was publicized with union pictures and news releases, helped bring about a settlement this week. The union won its wage demands and the right to organize office and sales personnel.

Hence the present A.F.L. contract was signed without benefit of NLRB blessing, and signed when everybody knew that a second election was in the cards.

• **All-Out Fight**—NLRB challenged the contract in the courts. The C.I.O. has denounced it. And in the C.I.O. case against the present election, the maneuvers surrounding this move on the part of the canners and the teamsters will be the central issue in claims of unfairness.

Above and beyond the contract and the election, however, above and beyond the specific issue of the canneries, for that matter, Dave Beck's boys on the Coast are elated by what they hold to be the biggest setback the A.F.L. has yet dealt the C.I.O.

Certainly the C.I.O. was in there fighting with all it had. Right-wing men worked side by side with left-wing factions. And up from Los Angeles, the territory lately taken away from C.I.O.'s Harry Bridges, came both funds and hands to help out. Philip Murray, national C.I.O. president, traveled to San Francisco to speak (and was denied radio time). Other C.I.O. big shots came to the scene and the Washington (D.C.) office of the Food, Tobacco & Agricultural Workers (the C.I.O. union claiming the cannery workers) was denuded to supply San Francisco with personnel.

As one C.I.O. official put it, the campaign in the canneries developed more unity within the C.I.O. than that organization has seen since the war. And a victory in the cannery vote would have tended to cement the C.I.O. factions together again, as well as give that organization's standing on the Coast a needed boost.

• **Heavy Spending**—All this is not to say that the A.F.L. teamsters took it easy during the campaigning. They didn't. Teamster locals throughout the state dug deep into their pockets to finance the greatest avalanche of anti-Communist handbills yet showered by one union on another. Sound trucks, special organizers, rallies, radio time, weekly news sheets, delegations, and so on ate into those funds at a great rate but continued, nevertheless, to furnish the cannery workers with a three-ring circus right up to the day before balloting.

Both sides spent heavily. Both had national backing and national resources. And the cannery workers were satiated with attention, entertainment, and persuasion.

The burden of the A.F.L.'s appeals—its consistent line these days (BW—Aug. 31'46,p82)—was that the C.I.O. was "communistic." The C.I.O. described the A.F.L. as "a company union." Added to the A.F.L.'s red scare, however, was the threat of the teamsters

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to close down the canneries employing members of A.F.L. organizations. Only A.F.L. truck drivers haul fruit and vegetables from grower to canner, from canner to retailer, from retailer to consumer. They are the lifeline of the canning industry. "We mean to use this lifeline to protect and improve the wages and working conditions of the A.F.L. cannery workers," the A.F.L. asserted.

• **Very Real Threat**—That was plain enough. If only a bluff, as the C.I.O. claimed, no cannery worker could be sure; and the nature of the industry's employment on the Coast is such that a threatened tie-up of cannery operations during the peak season (June through September) is a very real threat to a seasonal cannery worker.

About 85% of the employment is seasonal. And during these summer months cannery workers try to work long enough to pull down at least \$300 in wages, which makes them eligible for unemployment relief during the winter and from which in turn they come close to duplicating their summer's earnings.

Many races work in the canneries, and the women outnumber the men. Since the war, large numbers of Negroes and Mexicans have been added to the Spanish, Portuguese, Italian, Chinese, Japanese, and native born who make up the summer working staffs. Both A.F.L. and C.I.O. played the racial unity theme loud and often and accused the other of racial discrimination.

• **Youth's Problem**—But it's not this racial mixture that marks the cannery worker as a new problem to union organizers. It's the bobby-soxers; kids under 20 make up as high as 80% of the seasonal working force in some canneries and generally account for at least 30% to 35% in any cannery. They constitute perhaps 50% of the total working force, according to some estimates.

And the bobby-soxers had the organizers on both sides buffaloed. Here was a big and important group whose devotion to Sinatra was probably more real than their enthusiasm for anybody's union. However, since most of them plan to use their summer earnings to finance high school or college during the rest of the year, the A.F.L. power to close the canneries before the tomatoes (last big pack) ran out placed a clear issue before them.

• **Weakens the C.I.O.**—Furthermore, the C.I.O.'s old-line organizing appeal to "cannery workers" who "want a union free from the control of the bosses" undoubtedly left the bobby-soxers cold.

Although the cannery workers, highly seasonal, racially mixed, and dominated by the bobby-soxers as they are, will not be likely to become a militant or closely

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Los Angeles



IN THE WEST



IN YOUR INDUSTRIAL FUTURE

knit union for many years, if ever, the loss of this election by the C.I.O. weakens that organization seriously on the Coast. The A.F.L. is on the offensive, now. And the adage that "nothing succeeds like success" is appropriate. Bitter jurisdictional fights are looked for in the coming months, and the power of a labor organization to protect its affiliated unions will be an even bigger appeal in the future.

MASTER CONTRACT LOST

The United Rubber Workers (C.I.O.) lost a round this week in its fight for uniform contracts for all local unions in a single corporation in the rubber industry. The fight, however, was far from ended. Contract uniformity will receive serious consideration at the union's 11th annual convention in San Francisco on Sept. 16, along with the question of whether U.R.W. will go

along with C.I.O.'s current waiting policy on wage increases (BW-Jul.27 '46,p87) and with the drive of a number of big rubber locals for an escalator—or cost-of-living—clause in coming contracts.

Settlement of strikes at three General Tire & Rubber Co. plants, which had been considered a test fight for uniform contracts, sent more than 5,000 General Tire workers back to their jobs in Waco, Tex., Akron, and Jeannette, Pa. The stoppage lasted about nine weeks.

Waco employees of General Tire won across-the-board hourly pay boosts of 14¢ and a joint study of individual wage rates. Jeannette workers accepted a 3¢ hourly raise offered by the Pennsylvania Rubber Co., General Tire subsidiary, and a joint study of all wage rates. Locals in both plants had protested against geographical differentials in rates.

F.A.A.'s Weapon

Circuit court approval of collective bargaining rights for foremen gives union new vigor in its organizing program.

Confronted by a growing challenge from John L. Lewis' United Clerical, Technical & Supervisory Employees Union (affiliate of the United Mine Workers' District 50), the independent Foreman's Assn. of America this week pressed to solidify its collective bargaining position and extend its organizing activities. In pushing its campaign, the F.A.A. proclaimed—among other things—that its activities now have the legal indorsement of the U. S. Sixth Circuit Court of Appeals.

• **Based on NLRB Orders**—A recent 2-to-1 decision in the Packard Motor Car Co. case (BW-Dec.22'45,p94), which the company is asking the court to reconsider, held that supervisory employees must be accorded the full collective bargaining rights guaranteed by the National Labor Relations (Wagner) Act, even though such workers are undeniably a "part of the front line of management."

The court also ruled specifically that general foremen, foremen, and assistant foremen in mass-production plants "may properly be grouped in one unit" for collective bargaining purposes.

The court majority's decision supported prior National Labor Relations Board orders on both of these points, but the court veered away from NLRB's latest rulings to draw a line at which—in its opinion—the organization of supervisory personnel should stop. This reservation, more than any other point in the decision, was to F.A.A.'s liking.

• **Question of Control**—According to the court's compromise decision—which if supported by the Supreme Court might become the bench-made law of foreman unionization—the test of whether a union may be properly certified as collective bargaining representative of supervisory employees is whether the union is "controlled directly or indirectly by the men whom they supervise." The union must be "independent and neither a part of nor controlled by the union representing the production workers." Since F.A.A. fits into this designation which leaves "foremen uncontrolled agents in dealing with the rank and file," and since the court decided that there is "no reason . . . to anticipate that the independence of the F.A.A. will in the future be destroyed," the court upheld its claim for recognition by Packard.

This reservation in the court decision focused attention on another legal ac-

Strategy of Odors in Drive on Y.M.C.A.

Old techniques were not enough; so 13 A.F.L. unions worked out new strategy—including a garbage blockade, a siege of hobo customers, and a boycott against Chicago's Community Fund—to apply pressure against the Young Men's Christian Assn. in a ten-week strike for recognition.

• **Old Dispute**—A.F.L. organizing activities among 600 eligible Y employees in the Windy City began in May. Two weeks later the unions paraded outside seven buildings in what the unions said was a strike and the Y.M.C.A. (claiming only 80 workers away from regular jobs) said was nothing more than an organizing drive. Currently, picketing is going on only at the Y's central building, hotel, coffee shop, and laundry.

The hotel and coffee shop have been hardest hit. Garbage collections were halted for five weeks by pickets. When garbage filled an alley and scented the neighborhood, Y.M.C.A. officials tried to move it with a hired truck and nonunion driver. Dumps refused to permit the truck to unload without A.F.L. clearance. Municipal sanitation officials finally intervened.

• **Hoboes Order Coffee**—With the garbage problem cleared up, hoboes took over. When the coffee shop opened for an expected noon hour rush, it got, instead, 52 customers, poorly dressed, dirty, and ill at ease.

Each ordered a cup of coffee, took a table. Regular customers—normally 350—went elsewhere. Hoboes paid with 50¢ pieces which the Y.M.C.A. said came from A.F.L. recruiting crews.

Current strategy bars A.F.L. contributions to the Chicago Community Fund—shared by 192 organizations—because the Y.M.C.A. is on its budget for \$200,000. A.F.L. contends the money would help to carry on the Y's "antiunion" activities.



To her duties, Mrs. Elizabeth Gers, Y.M.C.A. coffee shop cashier, added another — washing "A.F.L. coffee money" tendered by 52 of the "unwashed."

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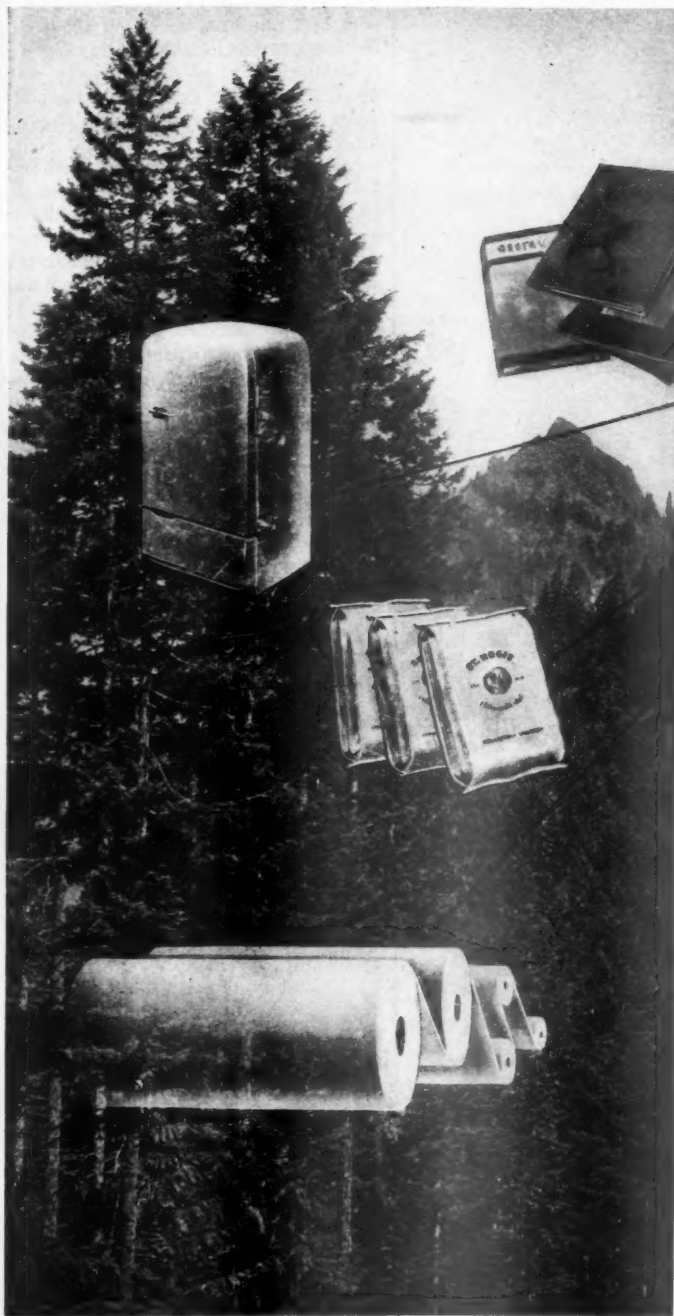
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FLORIDA
THE SUNSHINE STATE

tion already on its way to the U. S. Circuit Court of Appeals in the District of Columbia, in which the Jones & Laughlin Steel Corp. is opposing recognition of Lewis' supervisory employees' union as collective bargaining agent for coal mine foremen. The significant difference is that the Lewis supervisory union is affiliated with the United Mine Workers of America (A.F.L.) made up of mine production workers.

• **High Court Test Sought**—By mutual agreement between Jones & Laughlin and the Lewis union, every effort is going to be made to get a speedy Supreme Court test of the entire issue of unionization of foremen by a production workers union.

Packard—while asking the appeals court to reconsider on constitutional grounds—also is preparing to take its case before the Supreme Court. Key point in its argument, as well as in that of Jones & Laughlin, will be that supervisory employees were not intended to be included in Wagner Act coverage. Packard can quote the dissenting decision in the current case, that the "controlling authority" of the high court "interprets the labor act as clothing supervisory employees with the authority and responsibility of employers," and that therefore "collective bargaining provisions are not available to them."

In setting up its compromise, the court majority recognized a "dual character" for supervisory personnel, and cited legal precedent for denying those in such a category (employees, yet representatives of management) the right to affiliate for bargaining purposes with a union of production employees. But it recognized their right to bargain collectively under the provisions of the Wagner Act with regard to their own supervisory wages and particular conditions of labor.

• **Stronger Position?**—As was expected, the court decision has been grasped as a potent weapon for F.A.A. organizers and negotiators. Supported by it, F.A.A. has reopened talks with Ford Motor Co., biggest F.A.A. employer, after an earlier impasse over grievances posed a strike threat. If the decision stands, then F.A.A.—which has felt, along with other unions, the sharp pinch of reduced finances and drops in membership—will be in a strong position to broaden its organizing work.

The long-expected challenge from Lewis' supervisory union, which has held off from organizing work outside the coal mining districts largely because of the uncertainty of its legal position, will gain in importance and immediacy if the court's position is upset and production workers' unions are given a clear road to go ahead in their job of signing up foremen.

Gag on Employers

NLRB holds management must not force workers to hear antiunion talks. Reilly urges more leeway for employers.

An antiunion speech by an employer to an involuntary or "captive" audience constitutes illegal interference with workers' organizing efforts, and an unfair labor practice, under two recent decisions by the National Labor Relations Board. Gerard D. Reilly, who retired last week as an NLRB member, concurred with reservations in one decision, dissented in the other.

The board decided that a speech made by a plant manager to an "involuntary audience of employees" of the Van Raalte, Inc., hosiery plant at Athens, Tenn., went beyond free speech guarantees given employers under the American Tube Bending case in the Circuit Court of Appeals (BW-Oct.23 '43,p5) even though the speech did not



STATIC REMOVER

Richard P. Doherty, who steps into a new job as director of the National Assn. of Broadcasters' labor relations department, has the tough assignment of smoothing radio's relations with the unions—particularly with J. Caesar Petrillo's A.F.L. musicians. Doherty formerly headed Boston U.'s economics department, since 1941 has been executive director of Boston's Industrial Relations Council and an arbitrator in labor disputes.

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mention directly an organizing drive by the American Federation of Hosiery Workers (C.I.O.).

• **"Covert Threat"**—In the American Tube Bending case an employer was declared to be within his rights when he promised to abide by the results of an NLRB election, but expressed a preference for a no-union vote. In the Van Raalte case, the board considered the timing of the speech—at the start of a C.I.O. organizing campaign in the mill—conclusive proof that it was intended to influence the workers' attempt at self-organization.

The board held that the speech was not "an argument, temperate in form, that a union would be against the employees' interest"—as permitted under the American Tube Bending decision—but was "a covert threat" against anyone "not satisfied" with nonunion operations at Van Raalte.

• **Reservation**—Reilly concurred in the decision that any speech designed "to implant fear" constitutes illegal interference with organizing rights, but interpreted the American Tube Bending court ruling to permit an employer to use arguments against the union "couched even in bitter terms" as long as no threat of reprisals is made or implied.

The second decision on similar grounds came in a case involving the Clark Bros. Co., Inc., of Olean, N. Y., and the United Auto Workers (C.I.O.).

The board ruled that the company violated the National Labor Relations Act by ordering its employees to assemble, one hour before an NLRB election, to listen to a speech by the president of the firm. The election was won by the management-favored Employees Assn. of Clark Bros. Co.

• **Required Listening**—NLRB's majority, in the belated ruling on the unfair labor practice charge, said that employees were "a captive audience" because the meeting was called during working hours when they could not leave the plant; foremen ordered employees to gather about loud-speakers, and all machinery was turned off so that there was no alternative to listening.

Reilly dissented. As in the Van Raalte case, his test of the legality of the employer's remarks was whether they implied a threat of reprisals for joining a union. He decided that they did not.

• **Suggested Reforms**—The retired—but not retiring—member of NLRB incorporated in his dissent the appeal he has been making for the last five years: more freedom for management in union organizing drives.

Before turning over his NLRB seat to James J. Reynolds (BW—Jun. 22 '46, p. 80), Reilly took time out to air a few more ideas. Employers, he believes, should be given broader rights to petition for NLRB elections; the status of

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supervisory employees should be clarified, and no administrative agency should be permitted to certify foremen in bargaining units (page 86) under the present Wagner Act; protection of the act should be withdrawn from unions which strike for objectives contrary to the act or which could be gained by orderly processes under the act; NLRB should be granted power to cope with secondary boycotts; and NLRB enforcement and prosecuting functions should be transferred to the Labor Dept. to make the board solely a fact-finding and judicial body.

Maritime Unrest

Great Lakes strike is called off, but more trouble brews on both coasts and along the Gulf. NWSB ruling is protested.

Although the National Maritime Union (C.I.O.) called off its general shipping strike on the Great Lakes in order to concentrate its efforts against a bare handful of employers still holding out against a shortened work-week, all was far from calm this week on the maritime shipping front.

• **More Strike Calls**—Dissatisfaction of A.F.L.'s Seafarers' International Union and Sailors Union of the Pacific over National Wage Stabilization Board rejection of negotiated wage increases resulted in A.F.L. maritime strike calls for 43,000 seamen on Atlantic, Pacific, and Gulf coasts.

Coupled with promises of C.I.O. maritime leaders to back the A.F.L. in its demands, and with strike threats from Harry Bridges' International Longshoremen's & Warehousemen's Union (C.I.O.), the A.F.L. action created a new uncertainty over what ships will continue to move, and for how long.

• **Work Period Shortened**—N.M.U. last week announced it was calling off its lake-wide strike because "we have been able to break the seven-day work-week and establish the hours of 48 at sea and 44 and 40 in port." N.M.U. reported most employers under contract had signed a pattern agreement reached with the Bethlehem Transportation Co., and that the Lake Carriers Assn. (of employers) has recommended that seamen on all unorganized ships be given the same contract terms.

Ship operators had a different version of why the union had ordered crews back to their vessels. At best, operators claimed, N.M.U. had had scant success in tying up lake shipping (BW—Aug. 24 '46, p17). The employers said the union had been forced to give up its general strike—and with it hope of extending its jurisdiction among unorganized com-



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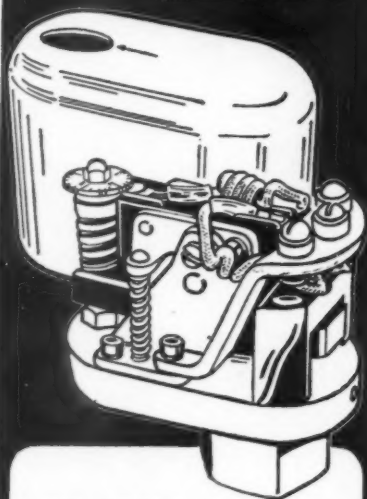
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panies—because it could not stop ship movements with its limited strength (about 1,100 of 12,000 sailors on the lakes).

• **Ceiling Protested**—Strike calls by the two A.F.L. maritime unions were in

protest against an NWSB order limiting them to the same wage increase (\$17.50 a month for able-bodied seamen) given N.M.U. seamen in a strike settlement. In collective bargaining with employers, the S.I.U. won a \$22.50 monthly in-

THE LABOR ANGLE

Change

The union movement is being forced to make a major change in its organizing tactics.

Not since 1937, when the C.I.O. struck the Little Steel companies in an effort to make them recognize the steelworkers union, has the strike figured importantly as an organizing device. The C.I.O. had to call off the Little Steel strike with its object unattained after a financial outlay that almost bankrupted the industrial union combine. When a year afterward the C.I.O. won the exclusive bargaining rights it sought from Little Steel through a National Labor Relations Board election, the strike as an organizing, recognition-winning instrument went on the shelf for both the C.I.O. and the A.F.L.

Since that time, with few important exceptions, union organizing drives have been pointed at using the machinery provided by the Wagner Act for achieving their ends. The two big current organizing campaigns—the C.I.O. and A.F.L. Dixie operations—have been planned, staffed, and budgeted on that basis.

But while the labor movement had cause to congratulate itself that the recently adjourned 79th Congress was stopped by the White House from revising the federal labor code, it is now learning that a little-noticed legislative action will have a profound effect on its organizing activities. The last Congress pared almost \$700,000 from NLRB's annual budget and already some 200 of the board's 990 employees have had to be fired so that the agency can live within its appropriation.

Short-Handed

With a case load higher than at any time since 1937—the board has a backlog of about 5,000 cases and is docketing new ones at around a 1,000-a-month rate—NLRB's operations will be slowed down considerably by being short-handed.

What this means in practical terms is already apparent. The C.I.O.,

for example, gets a majority of cotton textile workers signed up at a southern mill and petitions the NLRB for an election. The petition goes to the board's southern regional office in Atlanta where, reports indicate, less than half the necessary personnel is employed to keep the paper work there current. The office is falling further and further behind. Meanwhile employers may utilize their rights under the law to raise objections, demand hearings, and assure themselves that all the procedural technicalities are fully satisfied. Once the papers clear Atlanta, they arrive in NLRB headquarters in Washington where further delays are occasioned by curtailed staff.

As weeks become months and whole seasons go by while the case "pends," things are happening in the mill named in the petition. When the application was filed, a majority of the employees were, like as not, all steamed up by C.I.O.'s efficient organizers. Filing of an election petition usually means the recruiting campaign has developed to fever pitch. But unless the employer voluntarily capitulates, the union can't function as a union until it has recognition. It can't negotiate, it can't settle grievances, its committees don't meet management,

Lost

Under such circumstances, it is a very difficult feat indeed to keep the union alive for very long. The original enthusiasm, fed by claims, slogans, and promises, dies out. And, frequently, when the election is held after a long interlude following the filing of the petition, enough employees have gone cold or sour on the union to pile up a majority vote against it and the campaign is lost.

Faced with such problems all the time now, both the C.I.O. and the A.F.L. are being forced to find other means to bring an organizing effort to a successful conclusion. They are returning to the strike weapon—the means they used before the Wagner Act was universally employed to force an employer to enter into a contract.

crease for A.B. members, and the S.U.P. \$27.50 a month more for the rating.

The unions protested that NWSB's rejection of a negotiated increase for a smaller one set by "government fiat" illegally deprived them of their collective bargaining rights. This position was seconded by N.M.U.'s president Joseph Curran. The tender of support won no praise from A.F.L. Curran, the federation unions said, merely was bidding for \$5 more for N.M.U.

Trucking Crisis

New York City tie-up stalls freight movement over nation as embargo is imposed. Strikers ask 40% wage increase.

Business in New York City found its efforts to swing back into high gear after the Labor Day week end seriously impeded by a trucking strike which police estimated immobilized over 20,000 vehicles and which, because railroads and interstate truckers imposed an embargo on the city, stalled freight movement across the country.

• **Strikers Demand 40%**—Theoretically only the city's general trucking contract, covering about 12,000 A.F.L. drivers, was involved in the dispute, but the only cartage moved as the walkout began this week was fresh fruits, vegetables, milk, and retail deliveries. Operators not directly affected by the tie-up were not letting their trucks leave garages.

The New York State Board of Mediation and city officials, working day and night to find a settlement formula before the damming of the city's trucking paralyzed the metropolitan area, were seriously handicapped by the fact that the whole walkout was unauthorized. Union officials—whose rank and file had taken over under a "no contract no work" slogan—had no power to bargain short of a 40% wage increase demand which the operators termed "fantastic."

• **Settlement Rejected**—Mayor O'Dwyer recommended that the parties accept an 18½¢-an-hour pay boost compromise plus a liberalized vacation schedule and a 40-hour week. The operators turned it down cold and the union committee, though promising to support it, was unable to sell it to its membership.

So confused was the situation at mid-week, that even the state and city's attempt to make special provision for the movement of essential commodities other than perishable food came to naught. It seemed apparent that government officials would have to mark time either until the rebellious rank and file named a committee of their own to do some bargaining or until either the strikers or operators gave up.



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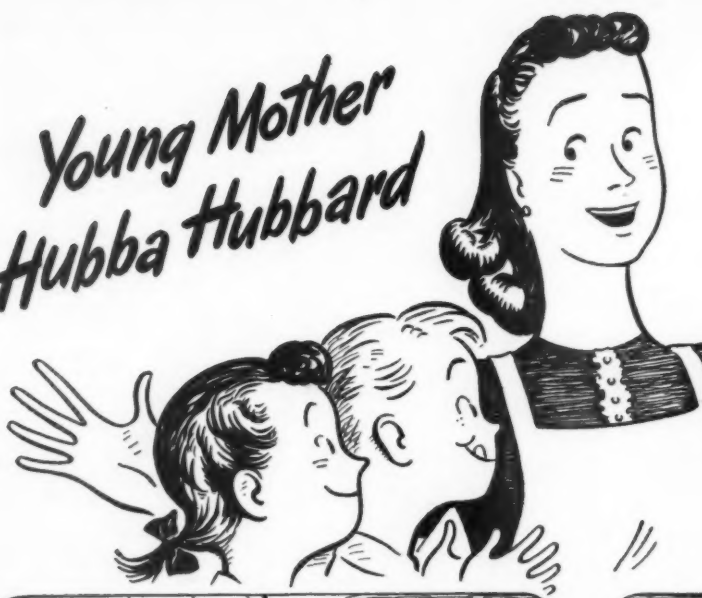


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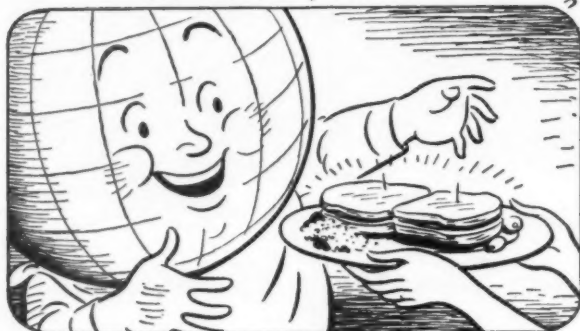
WILLIAM E. LONG, Secretary-Director
802-A Harrison Street, Topeka, Kansas

Young Mother Hubba Hubbard

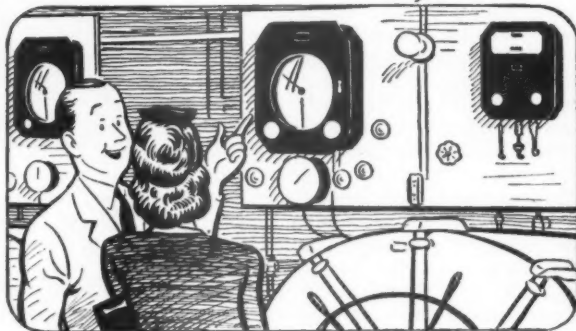


1 Young Mother Hubbard
went to the cupboard
To prepare for her family a treat.
When she got there,
the cupboard was bare
Except for—Wow!—
one can of meat!

Richard
Deffen



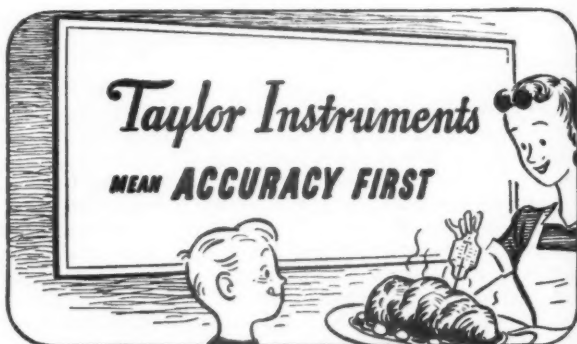
2 She went to the canner's to see how they manage
With all the world's tongue
hanging out for a sandwich.
(There's a million kids hungry for even a taste
So we can't let the tiniest bit go to waste!)



3 She said, "Food's so scarce,
I don't see how you've done it!"
"We don't," canner said. "Taylor Instruments run it!
With their Fulscope Controllers and gadgets and such
Our quality's tops and our waste isn't much!"



4 So she went to the store to get smart herself
And flew straight to the Taylor Thermometer shelf.
With their Deep-Fry she conquers
the shortage of bread
By serving up French-fried potatoes instead.



5 And whenever the butcher
comes through with roast beef
Her Roast Meat Thermometer saves her from grief.
It helps prevent shrinking, and cooks it just right
Rare, medium, or well—oh boy, what a sight!

THE INTERNATIONAL OUTLOOK

BUSINESS WEEK

SEPT. 7, 1946



Several newly developing economic trends held the attention of experienced foreign traders this week.

The National Machine Tool Builders Assn. admitted that domestic sales are slumping seriously, and that the war-inflated industry must push its foreign business intensively if it is to maintain current production.

A similar export sales drive will develop in several other important industries within the next six to ten months unless output is drastically upset by protracted strikes.

Saddled with a hopelessly inflated production capacity, airplane producers long ago rushed out to get export business.

Results so far have been modest though they have brought the industry a flow of foreign buying missions.

Latest to come is a four-man group from Syria.

Indian industrial leaders still hope to make long-term contracts for U.S. equipment or for local production rights on a licensing basis.

A number of foreign industrial competitors—notably Britain, Canada, and Sweden—continue to make large export contracts which promise to win them preferred long-term replacement positions in important world markets.

Britain, holding an unquestioned lead in the drive for such rich Empire markets as South Africa—both for equipment and for contracts for local industrialization—has now rushed a special trade mission into the Caribbean countries.

Undismayed by unfavorable U.S. reaction to the bilateral, five-year wheat contract that Ottawa signed several weeks ago with Great Britain, Canada now is reported to be negotiating a similar deal with Belgium.

Brussels is said to be negotiating for 11,000,000 bu. of wheat a year.

The British contract calls for an average of 150,000,000 bu. annually.

Both contracts are based on the current Canadian export price of \$1.55 a bu.—well below the U.S. price of \$2.15 a bu.

Holland, just recovering from the Nazi occupation and worried over the possible loss of some of its prewar advantages in the Netherlands East Indies, is organizing a drive for a growing share in Latin American markets.

A Netherlands-South American Institute has been established in Amsterdam and plans to open trade promotion offices in several South American countries.

A few sophisticated U.S. manufacturers refuse to be fooled into overcautious inaction by continuing international bickering—mainly between the U.S.S.R. and the western powers.

Boldly admitting that the world is already unalterably split into two camps, they know the odds are against open warfare for at least ten years and are setting out to make the most of the interval.

The Monsanto Co. of Australia has completed a new plant near Melbourne for the manufacture of sulphadiazine and related drugs.

Designed and installed by Australian engineers, the plant will soon

THE INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
SEPT. 7, 1946

be able to supply all of Australia's requirements for the sulpha drugs.

A third manufacturer of phonograph records is about to invade the Mexican field, with an eye on markets throughout Latin America.

Columbia Recording Corp. will build a \$250,000 Mexican plant next year, to turn out 5,000 double-faced records daily.

Until now, RCA Victor Mexicana has had the only complete record factory in Mexico.

Three weeks ago a Mexican capitalist announced a plan for an all-Mexican firm to challenge Victor's hold on the market (BW—Aug. 17'46, p98).

In addition to the rapid-frequency steamship sailings recently reestablished between U. S. ports and the Union of South Africa, Washington has now paved the way for regular air service.

Recent ruling by the Civil Aeronautics Board grants Pan American Airways two routes to Capetown—one from New York via the Azores, Dakar, Monrovia, Accra, and Leopoldville, and the other branching off from the South American run at Natal and crossing the South Atlantic by way of Ascension Island.

CAB expects the service to carry only 4,000 passengers during the first year, but to help U. S. manufacturers grab the supply business formerly handled by Axis powers and amounting, in 1937, to about \$100 million.

South African manufacturers will also make a play to hold the trade developed with neighboring territories during the war.

A special trade mission has already left for Rhodesia, the Belgian Congo, French Equatorial Africa, Uganda, Tanganyika, and Kenya.

Aim is to preserve current trade in palm oil, cocoa beans, and timber to supply the Union's needs, and maintain annual outlets for more than \$25-million of South African products.

Removal by Washington of restrictions on export licenses on U.S. goods for Austria is part of the aggressive new drive to call Moscow's bluff in the battle for markets in Central Europe.

You can expect a similar plan to be pushed in Hungary, though results should not be expected before next year.

Watch the United Nations Food & Agriculture Organization conference in Copenhagen for a clue to the success of the forthcoming preliminary meeting of the International Trade Organization in London next month.

FAO leaders want a world food board and a two-price system for distributing foodstuffs and agricultural commodities in international trade.

If the scheme is accepted at Copenhagen, it still must be sold to the ITO which ultimately would be expected to translate it into practice.

Don't miss the encouraging note in the relaxation of wartime trading restrictions on wool.

Auction sales were resumed in Australia on Sept. 2, with buyers present from all parts of the world except Germany, Italy, and Japan.

London also is lifting restrictions and wool auctions will be resumed there on Sept. 9.

BUSINESS ABROAD

Bata Resumes Czech Ties

With an eye on western trade, Prague permits nationalized shoe giant to negotiate a two-way accord with its British progeny. Compensation issue still open. Zlin plant making rapid recovery.

PRAGUE—Czechoslovakia has made another gesture of friendship toward the western capitalist world.

After months of difficult and occasionally acrimonious negotiations, the nationalized \$500 million Bata shoe enterprises have renewed their commercial ties with the Bata empire, extending to 28 foreign countries with 4,000 retail outlets. The move was long-delayed, but not unexpected (BW—Jan.26'46, p22).

• **Exchange of Goods**—Under an agreement signed months ago but just now revealed, the Czech Bata firm—known since nationalization as the Czechoslovak Leather & Rubber Enterprise, National Enterprises, Prague—is sending machinery and shoes to a British Bata offspring, Bata Development Ltd., London. The British firm will supply the Czech enterprise with raw materials and semimanufactures.

As a result of the agreement, which was arranged under the watchful eye of the Czech Ministry of Foreign Trade, an exchange in each direction of goods valued at about \$1,000,000 will now be possible.

In fact, Bata Development Ltd. has already shipped goatskins, bottom leather, needles for shoe machinery, and finished upper leather valued at \$600,000 from Rotterdam via railroad to the Bata works at Zlin, Moravia.

• **New Phase**—In the other direction, Czech Leather & Rubber Enterprises, Zlin, has shipped 100,000 pairs of footwear, mostly rubber boots.

Conclusion of the agreement between the Czech management of the Zlin works and the London firm ends an impasse that threatened the entire Bata empire.

For months it seemed that seizure of the Moravian Bata works and creation of a national enterprise under a five-man management committee headed by a Communist, Dr. Ivan Holy, spelled the end of a family company that circled the globe and made shoe history for half a century to the melodic clink of gold entering the Bata coffers. The giant Zlin works mothered the worldwide empire, supplying know-how and equipment unobtainable elsewhere.

• **Production Recovering**—Already the Zlin works are reported to have achieved

production of 500,000 pairs of shoes a week—about 50% of prewar output by the privately run firm. But less than 80% of the plant is now in operation, since rebuilding has not caught up with the damage done by Allied bombers in 1944.

While shoe production lags because of inexperienced management and lack of raw materials, labor, and plant space, machinery output of the Zlin works is zooming. Shoe production at the prewar level of a million pairs a week is scheduled for 1948.

• **Compensation Issue**—Left unsettled is the question of compensation to the Bata family for the nationalized property. The company was blacklisted by the Allies, and the wartime manager has been charged with collaboration by the Prague government. When Eduard Benes returned with his government to Prague and swiftly nationalized the large

est Czech firms and utilities, compensation was assured—provided the companies concerned had a record of non-collaboration.

Since the end of the war, and failure of Jan Bata—brother of the founder—to get to first base in negotiations with Czech officials, Thomas J. Bata, son of the founder, has been maneuvering into position to clarify the future status of the shoemaking empire to which he falls heir.

Key figure in the protracted discussions, and pinch-hitter for 32-year-old Tom Bata when he is attending to the Bata Canadian branch's business, is A. F. White, a Briton and the real brain in the foreign management of Bata enterprises. White's signature appears with Thomas Bata's on the Zlin-London agreement.

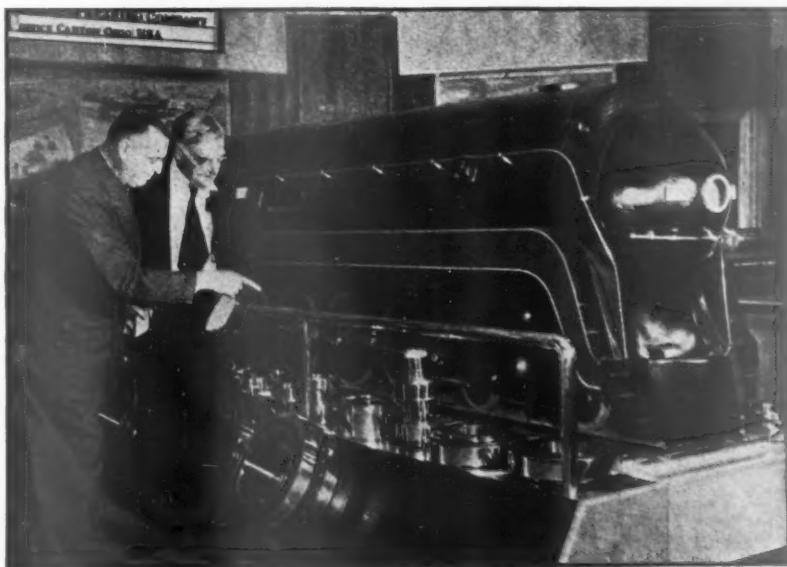
• **Agreement Terms**—Outstanding features of the commercial accord between the Czech Bata firm and its London relative provide that:

(1) Zlin will have complete control of machine types shipped to foreign branches and of what machines go to each branch.

(2) The Zlin firm will have the first right of purchase of any machine exported and later offered for sale.

(3) Payment for exports of Czech machines will be in the currencies of receiving countries (not necessarily pounds sterling).

(4) The present contract is con-



UNDERSIZE ROLLING STOCK TO SELL THE SOVIETS

This week at the Allied Railway Supply Assn. show in Chicago, the Timken Roller Bearing Co., Canton, Ohio, displayed a 16-ft., quarter-size model (above) of its Norfolk & Western Ry. series 600 steam locomotive. But Chicago was just a way station for the \$50,000 toy, whose boiler rises to show its inner workings; final destination is Moscow and the industrial sample fair established (BW—Sep.16'44,p112) as a "shopping" and training center for Russian industry.

sidered only a preliminary to larger, more inclusive agreements.

(5) Both parties pledge themselves to facilitate their dealings by appeal to the foreign exchange and import-export license authorities of each country, to encourage the resumption of trade.

• **Czech Gains**—Czech trade has made a spectacular recovery since the war's end, although it is still only about one-third as large in dollar value as before the war. The Bata Zlin works have been instrumental in promoting deals to further the expansion.

In the first five months of this year, Czech imports totaled \$48,700,000 and exports ran to \$60 million. Czechoslovakia's best customers were Switzerland (\$15,500,000), the Soviet Union (\$8,300,000), and the United States (\$5,400,000). The U.S.S.R. (\$9,000,000), Hungary (\$6,000,000), Switzerland (\$5,000,000), and the U.S. (\$5,000,000) were Czechoslovakia's chief suppliers.

Germany was the sixth largest Czech supplier (\$2,800,000) and tenth largest customer (\$1,800,000) during the five-month period.

• **Foreign Deals**—Two recent trade arrangements made by the Bata firm call for:

(1) The purchase of \$1 million of synthetic rubber from the United States, arranged by Miles Sherover, American agent representing U. S. firms in Prague.

(2) An exchange of an unspecified,

but reportedly large, shipment of Bata shoes and rubber boots to the U.S.S.R. for synthetic rubber from the Schonau plant in Germany and raw hides from the Soviet Union.

Self-designated bridge between the Soviets and the West, Czechoslovakia is playing both sides cautiously and cleverly. Reconstruction of the Bata empire with its farflung connections will foster Czech trade, earn needed foreign exchange.

FRENCH CARS IN MEXICO

MEXICO, D. F.—Following on the heels of British traders whose products are already rolling on Mexican roads, the first shipment of French automobiles since the end of the war is en route to Mexico.

The cars, manufactured by the Regie National des Usines Renault at Billancourt, Seine—the nationalized Renault plants—are of two types: (1) Juvaquatre, a small four-passenger, four-cylinder car; (2) Fourgonette, a light, 300-kilo-load station-wagon-truck.

A new Mexican-owned corporation, Compania Automoviles, S. A., was recently formed to sell the Renault cars which were popular in Mexico before the war. President and general manager of the firm is Manuel Antuna.

The French factory has promised regular monthly quotas to the Mexican distributor.

Can Controversy

Mexican rivals protest aid given by their government to affiliate of Continental, which will make food containers.

MEXICO, D. F.—Mexican tin can manufacturers, fighting to preserve their vested interests, have failed in their efforts to prevent the setting up of a Mexican affiliate of Continental Can Corp.

The new company, Envases Generales Continental de Mexico, S. A., is predominantly Mexican-owned. Continental Can Corp. holds a 20% share of the \$1,200,000 capital and will supply machinery and technical assistance during the firm's infancy.

• **Plant Being Readied**—Construction of the factory is now in progress, and machinery from the United States is being moved in, preparatory to the start of production in October. The plant will make chiefly food containers. Mexico normally imports quantities of food containers from the United States.

However, Mexican can makers—chiefly engaged in making noncompetitive types of cans—have been conducting a campaign of protest in local newspaper advertisements against the government's decision to grant the new company a rating of "new and necessary." This classification provides tax-exemption during the first years of production and permits duty-free importation of capital equipment.

• **Charges**—The Mexican rivals charge the United States with having injured their interests by allocating tinplate to nonmanufacturers during the war and to the Continental Can affiliate before it is ready for operation. They are endeavoring to persuade government officials to rescind the "new and necessary" rating. Meanwhile the new factory is rapidly nearing completion.

INDIA MECHANIZES FARMS

Indian purchases of United States war surplus materials have accelerated mechanized field-crop cultivation.

In recent months India has imported 450 diesel tractors from the U. S. and the United Kingdom and obtained an equal number from war surplus in the China-Burma-India area.

Indian implement factories, which were converted to munitions production, have so far been unable to meet backed-up demand for agricultural hand tools.

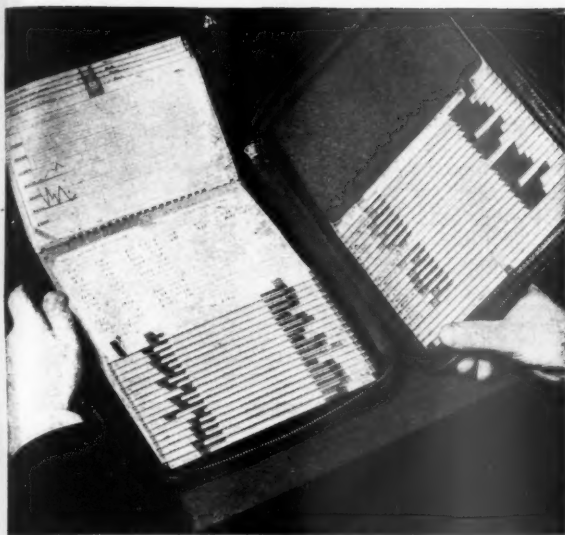
Now the government has decided to help Patel & Co. start the manufacture of plows, harrows, and cultivators.

An aircraft factory at Charpuri, near



GOOD NEIGHBORS MAKE GOOD TRADE

In New Orleans' smartly equipped International House (left to right), Harry De Butts, Southern Ry. vice-president, Julio Salas, Panama import-exporter, and House managing director Charles Nutter discuss trade projects as they lunch. The noncommercial center for Pan-American businessmen is a vital prop in the city's dream of becoming Western Hemisphere trade hub—a project that got a material boost when Washington created a "free port" in its harbor (BW—Jul. 6 '46, p34).



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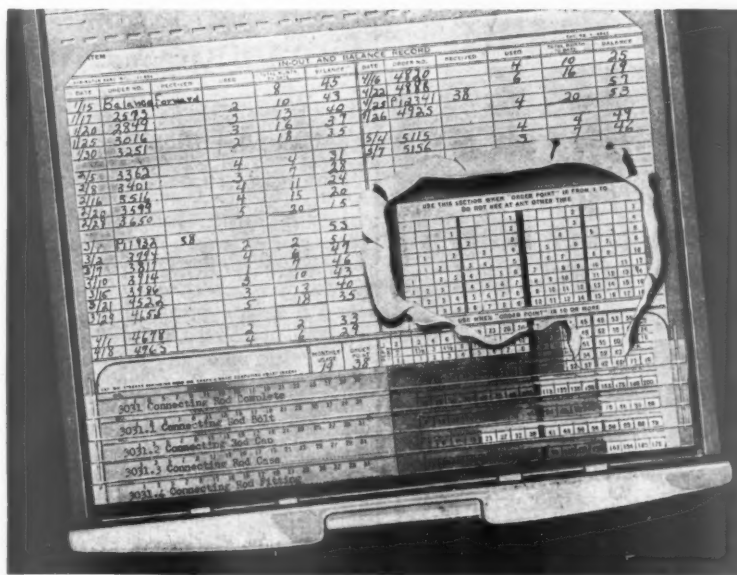
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Poona, has been leased to the company pending construction of a \$3 million permanent plant. Company engineers are being sent to Europe and the U. S. to study production techniques, and first production is scheduled for late this year.

Tata will provide the steel for the Patel plant, and the government has placed firm orders for 1,250 implements at a cost of nearly \$1,000,000. Deliveries on this order are to be made by February, 1947.

PROMOTE BRAZILIAN TRADE

Formation of two companies to promote trade between Canada and Brazil has been announced at Toronto.

Canadian-Brazil Commerce, Ltd., the Canadian company largely owned by Toronto capital, is headed by Maj. James E. Hahn of John Inglis Co., wartime munitions manufacturer.

The Brazilian company, with headquarters at Rio de Janeiro, is Brasil-Canada S.A. Industria e Commercio, and its director, A. F. Schmidt, is now in Canada.

The two companies will promote trade between the firms they represent, but in addition they will handle trade for other companies.

CANADA

Exchange Control

Wartime powers invoked to keep capital from flowing out of Dominion are extended 3 years after a parliamentary set-to.

OTTAWA—Foreign exchange control was written into the statutes of Canada for a three-year period last week just as Parliament closed a long 1946 session.

The law continues extensive powers that were vested in the Foreign Exchange Control Board at the start of the war, under which for a time Canadians were unable to spend money for travel in the United States. No such restrictions are now in force, the only limitations applied being on the export of capital, but the board has power to clamp them on at any time.

• **Senate Dissent**—Before the measure became law, it brought about a near revolt against the Liberal McKenzie King government by the strongly Liberal, appointed Canadian Senate. Canada's upper house is normally the less powerful and less active of the two houses of Parliament, but the foreign exchange control bill gave the elder statesmen a chance to hit out against regimenta-

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SPARKING UP A MARKET

U.S. shoppers might hunt long before lighting on such a galaxy of devices as that advertised by General Electric in the Mexico City Post (above). But in Mexico, where demand is light and such items are novelties, a few goods make a splash; in this country, the same stock would be virtually lost on the shelves.

tion and governmental intervention in business.

Typical of Senate reaction was the complaint of Sen. T. A. Crerar of Manitoba, a recent cabinet minister. He observed that the government was in the wheat business, in housing, in land, sea, and air transportation, in radio broadcasting, producing motion pictures, manufacturing rubber, and had recently created a Canadian Commercial Corp. to carry on export and import trade.

• **Rights Held Periled**—Foreign exchange control legislation, Crerar contended, taken with other legislation already on the statute books, would give to an administration inclined to authoritarianism the power "to completely shackle the commerce of the country and interfere absolutely with the fundamental rights of the individual citizen."

The Senate did not reject the bill as Crerar asked, which would have created something of a precedent. Its criticism, however, induced the administration reluctantly to agree to a time limit. If not re-enacted, the law will expire 60 days after the start of the 1949 parliamentary session.

Also, to bring it in line with current practice since the Canadian dollar came to parity, a clause was inserted making it legal to hold limited quantities of United States currency.

• **U. S. Dollars Passed**—The original regulations required everyone coming into

possession of foreign currency to turn it in to the board through the banks. When the exchange differential disappeared, American dollars started circulating. They reached merchants and others through tourist spending and were regularly given out in change.

Behind the administration's desire to continue the control plan is fear of a flight of capital to the United States. Holdings of gold and U. S. dollars as of the last report on Dec. 31, 1945, totaled \$1,508,000,000.

Since then, because of a preponderance of imports over exports in Canadian-American trade, there has been a deficit on current account.

• **Reasons Why**—During the next twelve years, bonds and debentures payable solely or optionally in U. S. funds fall due to a total of \$1 billion. The government urged retention of exchange control because it did not believe it could take care of the current deficit, be prepared to repay maturing obligations according to contract, and at the same time relax controls to permit nonresidents to sell securities at will and take the proceeds away and to allow Canadians to transfer capital abroad.

RAILWAY WAGES RISE

OTTAWA—Six months ago, R. C. Vaughan, president of the Canadian National Railways, complained that railway operators in Canada were in the "toughest kind of a squeeze play" due to rising costs and declining traffic volume.

The squeeze grew appreciably tighter last week as the government-owned C.N.R. agreed with all rail unions except one on a 10¢-an-hour wage increase. The same settlement was made by the Ontario Northland Railway, and the privately owned Canadian Pacific was expected to follow suit.

The railway settlement was within the 10¢ limit, set by Prices Board Chairman Donald Gordon, beyond which wage increases could not go without endangering price levels. To the striking steel, rubber, electrical, automotive, and other C.I.O.-affiliated unions, Labor Minister Humphrey Mitchell held up the railway settlement as the kind of deal which could be obtained without striking.

On the basis of the trend of railway earnings, however, the settlement probably means elimination or sharp reduction of surpluses. Last year the C.N.R. earned \$24,000,000 and budgeted for a surplus of \$7,000,000 this year. C.P.R.'s surplus last year was \$35,000,000.

Both roads are contemplating applications for freight rate increases but they have held off so far in deference to the government's price stabilization program.

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THE MARKETS (FINANCE SECTION—PAGE 70)

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial	150.2	163.2	171.9	150.7
Railroad	50.5	56.6	60.2	54.3
Utility	77.0	84.1	90.1	71.3
Bonds				
Industrial	124.6	124.7	123.2	121.1
Railroad	117.1	117.5	117.8	114.2
Utility	115.6	115.6	115.2	115.5

Data: Standard & Poor's Corp.

Wall Street Admits It's All Over

This week even Wall Street's most vociferous congenital bulls were at last willing to admit that the famous bull market move which got under way back in April, 1942, probably actually did expire late last spring.

Their belated waving of the white flag on this recently much-disputed point (BW—Aug. 10 '46, p106) was caused by the market's showing on Tuesday, a day that left them no alternative. Tuesday actually revealed the Big Board in the throes of its worst experience in many years—its sharpest price tumble, in fact, since late 1937, according to the Dow-Jones price averages, and the sharpest price spill since 1930, according to other popular market barometers.

• **Hard Hit**—Causing Tuesday's troubles were successive avalanches of selling orders, a distinct lack of supporting bids, and today's traditional thin markets. Before the closing gong on that day, individual stocks had rung up losses

ranging up to as much as \$17 in the case of such an ordinarily hard-to-jar blue chip as du Pont common.

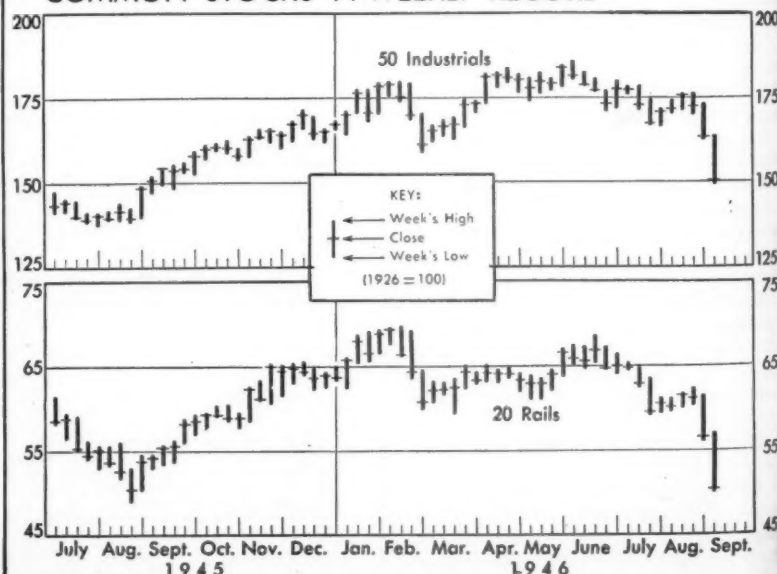
However, du Pont wasn't the only "active" stock to suffer severely because of a sudden boiling over of recent growing pessimism. Declines were many and widespread. Allied Chemical, for example, was off \$10 that day; Schenley and Hiram Walker were down \$10.50 each; Eastman Kodak down \$8.75; and Charles Pfizer, an early-1946 speculative favorite among the chemicals, off as much as \$8.50. American Tel. & Tel. was also down \$4.50.

• **On the Casualty List**—Casualties among the heavy industrial group were especially numerous. United States Steel and Bethlehem Steel declined about \$6 each, American Rolling Mills dropped about \$4, and Youngstown Sheet & Tube lost \$7. Among the motors, Chrysler and General Motors were down almost \$8 and \$4.50 to new 1946 lows.

Losses in other pivotal issues were likewise serious. Goodrich led the rubber group's retreat with a drop of \$6, and Anaconda and American Smelting among the metals were off up to \$5. Such stalwart oils as Phillips Petroleum and Texas Co. disclosed \$5 and \$4.50 declines; Montgomery Ward was off \$6.50; and American Woolen common and preferred showed \$7.50 to \$12.50 losses. National Dairy was another to hit a bad air hole. From \$37, it dropped off at one time Tuesday to \$30.

• **Rails and Utilities, Too**—Among the rails, which gave a particularly dismal

COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

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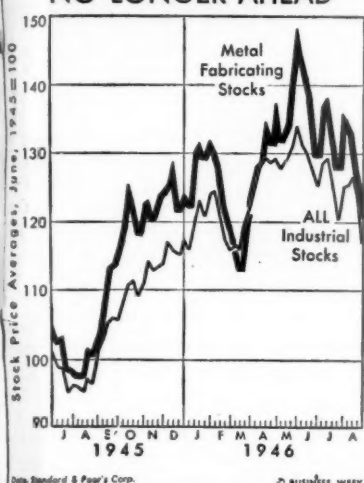
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Sept. 7, 1946 BUSINESS WEEK • Sept. 7, 1946

NO LONGER AHEAD



performance, \$5 and even above-\$10 losses were fairly common among such stocks as Santa Fe, Union Pacific, Southern Ry., Southern Pacific, Illinois Central, and Delaware & Hudson. And the utility group also wasn't neglected by Tuesday's avid sellers.

As a result, 986 of the 1,075 issues changing hands on Tuesday disclosed losses at the close. New 1946 lows registered totaled 548, and trading volume expanded to 2,900,000 shares, the highest level since last January.

• **What Indexes Showed**—Even more spectacular, however, were the changes wrought that day in the Dow-Jones averages. That industrial index, for example, disclosed a loss of 51%, the rail average a drop of over 8%, and the utilities a 7½% loss.

Wednesday's Big Board festivities revealed, almost from the start, a considerable drop in the previous day's selling pressure. Some definite rallying tendencies were also noticeable, accompanied by sufficient activity to send that day's trading total up to 3,620,000 shares, one of the memorable trading peaks of recent years.

Volatility Plus—As Usual

Operations of the metal fabricating companies have always revealed the wide swings typical of the feast-or-famine heavy industry group. So have their stock issues (chart). Such shares, traditionally eventual bull market parade leaders, have always been quick to nose-dive spectacularly toward the end of such parties.

• **Ups and Downs**—Earnings of seven leaders in that trade, for example, zoomed from around \$3,000,000 in 1935 to \$11,700,000 in 1936. By 1937, however, they had slumped to \$7,300,000, and 1938 actually saw a joint deficit of almost \$2,500,000.

Standard & Poor's metal fabricating

stock price index has done some even more sensational looping. In March, 1929, that average touched 504.5, but by November it had dropped down to 213.0, and a year later it had retreated to 64.7. From a 1934 low of only 39.8, it later skyrocketed to a 1937 high of 196.7, only to plummet by June, 1938, to 49.4.

• **Postwar Prospect**—Last summer few segments of business were considered by Wall Street to enjoy a more favored postwar position than the metal fabricating group. Importance was attached to the war-accumulated demand for its products and to the effects of an expanding domestic postwar economy. Booms of two years and upwards were forecast for many of the various durable goods requiring much copper and brass. Because of such factors, shares in the group became early-favored postwar buys.

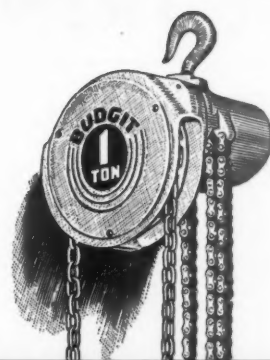
Street quarters still estimate that for many months to come huge amounts of copper cable, wire, and related products will be needed for privately owned utilities and government-sponsored electrification projects. And it is expected that ten years will be needed to satisfy the demands that housing will make upon the metal fabricators, upwards of two years to abate today's urge for home electrical appliances and equipment, and perhaps four years to meet the demand of the automobile and truck manufacturers.

• **Records Expected**—The industry likewise expects its production over the next few years to set new peacetime records, provided (a big if) strikes and material shortages can be eliminated.

Thus far postwar sales of the group have been badly affected by its own strikes and by shortages in copper, lead, cotton yarn, plastics, rubber, etc., caused in large part by outside labor troubles. Also sapping postwar earnings have been the sharp upward wage adjustments necessitated despite many sharp production-inspired wage hikes in wartime. As a result, average hourly wages in some cases are now 40% above 1941 levels, and for the trade as a whole 1946 wage costs are probably 50% to 60% above prewar figures.

• **Price Relief**—The trade has been granted 1946 increases in its OPA ceiling prices, which have offset some of its higher postwar operating costs. These boosts, however, haven't proved sufficient as yet, due partly to restricted production volumes, to overcome all 1946's unfavorable factors.

Earnings of four leaders in the group, in fact, came to only \$2,251,000 in the first half of 1946, as against \$3,769,000 in the same 1945 months. Despite recent improved operating conditions, the trade's full 1946 profits are not expected to run much above the net of 1945, its poorest year since 1939.



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THE TREND

THINKING ABOUT BUSINESS CYCLES

Although the average businessman is today up to his neck in a sea of labor and material shortages, and a rising tide of costs threatens to engulf him, he still manages to cast a somewhat apprehensive eye toward those business barometers that purport to register the shape of things in the future. For it is clear that the historical record of tomorrow will chronicle the present as a boom period, and past experience suggests that eventually some decline from the current high level of business activity is extremely likely if not inevitable.

Those of the business community who are engaged in the important task of anticipating such a change owe a debt of long standing to the National Bureau of Economic Research, which for many years has taken the lead in developing the statistics necessary to an understanding of the current business situation. The debt has been compounded recently by the publication of a new volume, "Measuring Business Cycles," that contains many of the statistical fruits of years of research.

• **While this new work** is of value chiefly to those who make the measurement of business activity their specialty, it is also crammed with facts that add further perspective to an interpretation of such periods as the troubled thirties. For after examining business in the U. S., Britain, France, and Germany for a period that embraces almost a century, the authors have concluded that, although business cycles have been getting more severe, their length has not shown any tendency to increase. Moreover, the study further confirms with a wealth of statistical detail the understanding of most observers that each business cycle is unique in itself.

It is this unique character of each business cycle that complicates the task of business forecasting. For if each period differs from all others, a knowledge of the facts of past experience can in itself throw but little light on the future. The facts require explanation, and explanation involves the selection of the most significant facts and the correlating of them in a series of cause and effect relationships.

• **In recent years the National Bureau of Economic Research** has concentrated on gathering and putting into measurable form the elusive facts of past experience. It has done little to explain their causal relationships so as to make of the business cycle less of an enigma. For this reason the news that Wesley C. Mitchell, for many years the guiding spirit of the National Bureau, will soon publish an explanatory, although preliminary, report on "What Happens During Business Cycles" has been received with gratification.

But the National Bureau is uniquely capable of performing a further service to the business community. It possesses the collective ability to apply the hard test of past experience to each of the prominent theories that

supposedly explain the cycle. While Prof. Mitchell's work will travel part of this road, we are told that it is not designed to make a thorough exploration.

• **Without question** the starting-point for any such test should be the theory of the cycle advanced by the late Lord Keynes. For the Keynesian doctrines not only are widely held by many contemporary Americans in positions of public responsibility, but they also stand out among the intellectual pillars upon which the British Labor Party has founded its program.

In its briefest (and all too simplified) form the Keynesian theory holds that business cycles are usually the end result of fluctuations in the total of investment expenditures. It is the spending by business and consumers on inventories, plant and equipment, housing, and such durable goods as automobiles and household appliances that is supposed to fluctuate initially, while consumer demand for nondurables only moves greatly as it feels the effect of the expansion or contraction of employment in the investment goods lines. Moreover, Keynes further assumed that consumers and business tended to save a larger proportion of their incomes as the level of income increased, thereby making necessary a growing expenditure for investment if a money income equivalent to the savings was to be kept in action.

• **The latest Business Week Report to Executives** (BW—Aug. 24 '46, p. 45) revealed that investment expenditures certainly have increased markedly over the past year and should continue to expand over coming months. But it also showed an exceptionally high expenditure on nondurable goods and a saving rate smaller than in prewar days—just the opposite of what Keynes assumed.

Is heavier consumer spending a temporary war-induced phenomenon or could it represent a fundamental change in the habits of consumers? This question and a host of others suggested by Keynes have significance in themselves. But such questions also possess an added importance in that hundreds of leaders in business and government now ask them, having either consciously or unconsciously adopted the Keynesian concepts as an aid to their thinking.

In a recent report on its activities, the National Bureau of Economic Research recognized the paramount position of the Keynesian theory in contemporary thinking about business cycles. It implied, however, that it would not pause in its important task of unearthing the facts of past experience in order to apply the whole of the information it now possesses to a test of the Keynesian doctrines. We hope this is not a final decision, and that, even as it continues to dig for historical detail, the bureau will occasionally piece together its great mass of facts along the lines so provocatively suggested by Keynes and others.

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